

## DOCUMENT RESUME

ED 244 197

CG 017 472

**AUTHOR** Lyons, Deborah L.; Lipowitz, Isaac  
**TITLE** The Nonutilization of Special Transport Services by the Elderly in Urban Areas: A Case Study of Washington, D.C. Final Report and Executive Summary.

**INSTITUTION** District of Columbia Univ., Washington, DC. Dept. of Community and Urban Planning.

**SPONS AGENCY** Urban Mass Transportation Administration (DOT), Washington, D.C.

**REPORT NO** DC-11-0012

**PUB DATE** Aug 82

**NOTE** 138p.; Report presented at the Annual Scientific Meeting of the Gerontological Society (36th, San Francisco, CA, November 17-22, 1983).

**AVAILABLE FROM** National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

**PUB TYPE** Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

**EDRS PRICE** MF01/PC06 Plus Postage.

**DESCRIPTORS** Community Services; Individual Characteristics; Information Dissemination; \*Older Adults; \*Special Programs; \*Transportation; \*Urban Areas; Use Studies

## ABSTRACT

Improving the mobility of older adults has been a major goal of transportation programs and policies for the elderly at both the federal and local levels. To examine reasons why eligible elderly individuals in urban areas do not use available special transport services, 140 elderly persons in the Washington, D.C. area were surveyed on the extent of their utilization of services and on demographic characteristics, including socioeconomic status, household composition, education, employment, social contacts, and needs. In addition, a telephone survey of 27 service providers was conducted to determine problems encountered in reaching elderly populations and possible solutions for the problems. An analysis of the results showed that less than 15 percent of the urban elderly who need special transport services use them. Reasons for nonuse fell four areas: (1) alternative available; (2) lack of knowledge; (3) service characteristics; and (4) pride. Nonusers who needed special transport services were often less active, less independent, and less healthy than the elderly persons who needed and used such services. Providers of special services relied on agency referrals and "word-of-mouth" to identify and service elderly populations. The findings suggest that service delivery agencies in urban areas must become more aggressive in exploring alternative methods for reaching elderly persons who need transport services. (Author/BL)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

Report No.: DC-11-0012

# THE UTILIZATION OF PUBLIC TRANSPORT

BY THE ELDERLY IN URBAN  
COMMUNITIES OF WASHINGTON, D.C.

Barbara R. Lyons  
Robert L. Litz

Department of Community and Urban Planning  
University of the District of Columbia  
Washington, D.C. 20008

U.S. DEPARTMENT OF EDUCATION  
NATIONAL INSTITUTE OF EDUCATION  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as  
received from the person or organization  
originating it.  
Minor changes have been made to  
improve readability.

Points of view or opinions stated in this  
document do not necessarily represent official  
position or policy.

PERMISSION TO REPRODUCE THIS  
MANUSCRIPT HAS BEEN GRANTED BY

U.S. DEPARTMENT OF EDUCATION  
EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

Document is available to the public in three  
National Technical Information Service  
Springfield, Mass. 01106-2210

Prepared by

U.S. DEPARTMENT OF TRANSPORTATION  
URBAN MASS TRANSPORTATION ADMINISTRATION  
University Research and Training Program  
Washington, D.C. 20590

NOTICE

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for the contents or use thereof.

1. Report No. DC-11-0012	2. Government Accession No.	3. Recipient's Catalog No.
4. Title and Subtitle THE NONUTILIZATION OF SPECIAL TRANSPORT SERVICES BY THE ELDERLY IN URBAN AREAS A Case Study of Washington, D.C.		5. Report Date August, 1982
		6. Performing Organization Code
		8. Performing Organization Report No.
7. Author(s) Deborah L. Lyons and Isaac Lipowitz		
9. Performing Organization Name and Address Department of Community and Urban Planning University of the District of Columbia Washington, D.C. 20008		10. Work Unit No. (TRIS)
		11. Contract or Grant No. DC-11-0012
12. Sponsoring Agency Name and Address U.S. Department of Transportation Urban Mass Transportation Administration University Research and Training Program Washington, D.C. 20590		13. Type of Report and Period Covered Final Report August, 1981 - August, 1982
		14. Sponsoring Agency Code
15. Subject Terms		
<p>16. Abstract</p> <p>This study is an examination of reasons why eligible elderly in urban areas do not utilize available special transport services. The objectives of the research project were to: (1) Analyze reasons given by eligible elderly for not utilizing available transport services; (2) determine the extent of utilization by the elderly; (3) construct socio-economic profiles of eligible elderly who do/do not utilize special transport services; (4) identify problems encountered by providers in reaching elderly populations; and (5) formulate recommendations for solving the problems identified.</p> <p>A case study approach was used to analyze and examine reasons for nonutilization of services and included: A field survey of 140 elderly persons; a telephone survey of 27 providers of special transport services; focused group discussions; and secondary data sources.</p> <p>Less than 15 percent of the urban elderly who need special transport services use them. Reasons for nonutilization can be grouped into four areas: (1) Alternatives available; (2) lack of knowledge; (3) service characteristics; and (4) pride.</p> <p>Nonusers who need special transport services are often less active, less independent and less healthy than the elderly who need and utilize such services.</p> <p>Providers of special services rely on agency referrals and "word-of-mouth" to identify and service elderly populations. Community outreach must move from this passive to a more aggressive phase.</p>		
17. Key Words elderly special transportation socio-economic characteristics needs assessment		18. Distribution Statement Document is available to the U.S. public through National Technical Information Service, Springfield, Virginia 22161.
19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages 131
		22. Price

## ACKNOWLEDGEMENTS

We would like to express our sincere thanks to the many people and organizations who so willingly gave of their time and knowledge during this year-long research effort. Without the participation and assistance of the many providers of special transportation services, senior centers, churches, clubs, organizations, and agencies, as well as the seniors themselves, this effort would not have been fruitful.

A special vote of thanks goes to: Art Lawson, formerly with the D.C. Office on Aging, for his continuous support and assistance; and Mazie Holland, Program Analyst with the Department of Community and Urban Planning, for her tireless assistance and encouragement throughout the project. We would also like to thank Barbara Newsome, of the Institute of Gerontology at the University of the District of Columbia, for her advice, support, liaison and coordination activities which contributed to the successful completion of this report.

Last, but certainly not least, we would like to express our gratitude to all members of the project staff for their contributions to this document: Charles Payne, research assistant, for his help with the literature review, field survey of the elderly and coordination and monitoring of the focused group discussions; Brenda Hawkins, research assistant, for her help with the telephone survey of providers, field survey of the elderly and monitoring of focused group discussions; and Roberta Shine, secretary, for her patience, unwavering support and assistance throughout and the typing of this final report.

## TABLE OF CONTENTS

	Page
Acknowledgements.....	1
Chapter One: Introduction.....	1
Study Objectives.....	1
Approach.....	2
Case Study Site.....	3
Report Organization.....	4
Chapter Two: Special Transportation Services for The Elderly: An Overview.....	6*
Background.....	7
Demand Estimation.....	11
Cooperation and Coordination.....	15
Chapter Three: Characteristics of Users and Nonusers of Special Transportation.....	18
Methodology.....	18
Composition of the Population.....	19
Users and Nonusers.....	20
Race and Sex.....	20
Household Composition.....	21
Education.....	23
Housing Arrangements.....	23
Employment.....	24
Financial Status.....	24
Important Problems.....	27
Social Contacts.....	28
Transportation Problems.....	31
Summary Profile.....	37
Chapter Four: Characteristics of Providers of Special Transportation Services.....	39
Methodology.....	39
Response.....	40



Analysis of Survey Results .....	41
User Restrictions .....	42
Trip Purpose .....	42
Service Utilization .....	42
Willingness to Expand .....	46
Coordination of Services .....	47
Client Identification .....	47
Complaints, Problems and Solutions .....	48
Chapter Five: Nonutilization of Special Transport Services .....	53
Methodology .....	53
Characteristics of Survey Participants .....	55
Travel Patterns .....	62
Use of Special Transport Services .....	67
Reasons for Nonutilization .....	70
Chapter Six: Improving Special Transportation Services:	
Senior Perspectives .....	73
Methodology .....	79
Group Types .....	74
Transportation Problems .....	78
Reasons for Nonutilization .....	79
Valuation of Special Transportation Services .....	80
Reaching Senior Citizens .....	81
Ideal Design for Special Transportation Services .....	81
Chapter Seven: Conclusions and Recommendations .....	83
The Nonusers of Special Transport Services .....	83
Servicing The Needs of The Nonusers .....	87
Recommendations .....	89
Appendices	
Appendix A: Survey Instrument for Providers of Special Transportation .....	A1
List of Survey Sites .....	A9

Appendix B: Survey Instrument for Nonusers of Special Transportation.....	B1
List of Survey Sites.....	B8
Appendix C: Moderator's Guide for Focused Group Discussions.....	C1
References.....	
List of Illustrations.....	
Tables	
3-1 Distribution of D.C. Population 60 and Over By Age and Sex.....	20
3-2 Population 60 and Over in the District of Columbia by Use of Special Transportation Services.....	22
3-3 Percentage Distribution of Elderly Users and Nonusers of Special Transportation Services by Race and Sex.....	22
3-4 Household Composition for D.C. Population 60 and Over.....	23
3-5 Housing Financial Arrangement for D.C. Population 60 and Over.....	25
3-6 Adequacy of Income to Meet Needs for D.C. Population 60 and Over.....	26
3-7 Estimated D.C. Population 60 and Over Identifying Money as a Problem Important to them Personally.....	27
3-8 Estimated D.C. Population 60 and Over Identifying Various Problems Important to Them Personally.....	28
3-9 Estimated Percentage of D.C. Elderly Identifying Transportation as a Problem Important to Them Personally.....	34
3-10 Reasons D.C. Elderly Cannot Get Where They Want To Go Using Public Transportation.....	36
4-1 Organizations Providing Special Transportation Services In the District of Columbia.....	41
4-2 User Restrictions for Special Transportation Services in the District of Columbia.....	43
4-3 Primary Trip Purpose Provided For By D.C. Special Transportation Services.....	44
4-4 Types of Complaints Received by Providers of Special Transportation Services.....	50
4-5 Problems Encountered by Providers of Special Transportation Services.....	52



5-1	Distribution of Survey Participants By Sex and Use of Special Transportation Services.....	56
5-2	Age Distribution of Survey Participants.....	57
5-3	Mode of Travel to Destination Point.....	58
5-4	Household Composition for Participants Who Neither Drove Nor Used Special Transportation Services.....	60
5-5	Types of Trips Taken by Users.....	63
5-6	Usual Mode of Travel for Users and Nonusers of Special Transportation Services.....	66
5-7	Reason Given by Users and Nonusers for Nonutilization of Special Transport Services.....	71

#### Figures

3-1	Estimated D.C. Population Age 60 and Over Who Have Not Completed High School.....	25
3-2	Estimated Percentage of D.C. Population 60 and Over Who Report a Need for Recreation and Socialization Activities.....	29
3-3	Estimated Percentage of D.C. Elderly Who Belong to Clubs and Organizations.....	30
3-4	Estimated Percentage of D.C. Elderly Who Are Registered to Vote.....	31
3-5	Estimated D.C. Population 60 and Over Who Say They Have a Physical Handicap Which Prevents Them From Doing Everything They Would Like to Do.....	32
3-6	Estimated Percentage of D.C. Elderly Who Say Lack of Transportation Keeps Them From Doing Things They Need or Would Like to Do.....	33
3-7	Estimated D.C. Elderly Who Cannot Get to Most Places They Want to Go Using Public Transportation.....	35
5-1	Percentage of Users and Nonusers Who Own or Rent Their Dwelling Unit.....	61
5-2	Type of Housing Unit Lived In.....	61
5-3	Average Number of Trips Per Week.....	62
5-4	Use of Special Transportation Services By Trip Type.....	64
5-5	Availability of Transportation For Users and Nonusers.....	65
5-6	Percentage of Nonusers Who Are Aware of Special Transportation Services.....	68

5-7	Percentage of Nonusers Indicating a Need For Special Transportation Services.....	68
5-8	Percentage of Nonusers Who Have Used Special Special Transportation Services Previously.....	69
5-9	How Users and Nonusers Learned About Special Transportation Services.....	69

## CHAPTER ONE

### INTRODUCTION

Improving the mobility of older Americans has been a major goal of transportation and elderly programs and policies at both the federal and local levels. One of the strategies designed to achieve this goal has been the development and funding of numerous special transport services as alternatives and/or ancillary travel modes for the elderly in urban and rural areas.

Although there has been a proliferation of special transport services during the last five years, there remains a gap between service goals and service levels. Most eligible elderly are not having their travel needs met through the use of special transport services. While many elderly who are eligible to participate in these programs have other alternative modes of travel, a significant number of urban elderly are still handicapped by lack of transportation.

This study examines the demand-side of special transportation for the elderly. Several recent studies have examined the supply-side issues revolving around coordination, vehicle design and maintenance and insurance. However, there is a need for more research focused on how to identify and service elderly and other transportation handicapped populations.

### STUDY OBJECTIVES

This study examines reasons why eligible elderly do not utilize available special transport services. The specific objectives of this research project were to:

1. Analyze in detail problems and/or reasons given by eligible elderly for not utilizing special transport services;
2. Determine the extent to which eligible elderly populations utilize special transport services;

3. Construct a socio-economic profile of eligible elderly who do/do not utilize special transport services;
4. Identify problems encountered by providers of special transport services in reaching eligible elderly populations; and
5. Formulate recommendations and guidelines for solving the problems identified.

In carrying out these specific objectives, the research team reviewed relevant literature, used data from an existing needs assessment survey, completed telephone and field interviews with providers and users, respectively, and held focused group discussions with D.C. elderly.

#### APPROACH

This research project used a case study approach to examine and analyze reasons why eligible elderly do not use available special transport services. Several primary and secondary data sources provided the base of information used by the researchers to assess problems and formulate recommendations.

An extensive review of literature focusing on the elderly as users of special transportation was completed. This review included materials on methodologies for needs assessments and demand estimation techniques utilized in predicting latent travel demand and coordination of services.

Data for the socio-economic profile were obtained through cross tabulations of data contained in the raw data files of the Elderly Needs Analysis Survey done by the Bureau of Social Science Research (BSSR) for the D.C. Office on Aging in 1978. The Office on Aging, responsible for the city's special efforts in transportation for the elderly, contracted with BSSR to conduct a telephone survey of 1572 noninstitutionalized elderly within the District of Columbia. Results from the survey were used in developing the needs assessment component of the District of Columbia Plan on Aging, 1981-1983.

Current inventory listings of special transportation services put out by the D.C. Office on Aging and the Directory of Special Transportation



Services published by the Metropolitan Washington Council of Governments (1981 revised edition) were used to identify providers for in-depth interviews. A telephone survey of 27 of the 43 providers of special transport services was conducted to determine characteristics of services available, methods of identifying and reaching target populations, demand for services, problems encountered in services delivery and participation in coordinated services.

A stratified random sample of 140 elderly were interviewed at trip destination points. Typical trip destination points of the elderly (i.e., senior centers, churches, clinics, etc.) were identified and selected. Survey sites were stratified according to the locations of residences of elderly who need, but do not use, special transportation services by wards. Field interviews investigated reasons for non-utilization of special transportation and mode choice of non-users.

A series of six focused group discussions with a total of 65 elderly persons were planned and held at various locations throughout the community. Information obtained through the Elderly Needs Analysis Survey, telephone survey of providers and field interviews were used as a guide in the conduct of these group sessions. The discussions were aimed at gaining insight into solution methodologies as perceived by users and/or potential users of special transport services.

Preliminary research findings and potential problem solutions were discussed during interviews with staff of the D.C. Office on Aging and with staff of the Institute of Gerontology of the University of the District of Columbia. Additional insight on implementation strategies was gained through these sessions.

#### CASE STUDY SITE

Data collection and interviews for this study focused on the city of Washington, D.C. The 1980 census reports Washington's population as 638,333, of which 103,655 (16.2%) are age 60 and over.



Using data from the Summary Report of Data from National Survey of Transportation Handicapped People (Grey, 1978) as a basis for comparison, the composition of the urban population of Washington is typical in some respects and atypical in others. While 11 percent of the total urban population are 65 and over and 52 percent are female, 11.6 percent of Washington's population are 65 and over and 53.7 percent are female. The total urban population is 81 percent white, however, whites comprise only 26.9 percent of Washington's total population.

According to the 1980 census, the elderly population in the District of Columbia is 61.6 percent female and 38.4 percent male. The racial composition of the elderly population is 37.5 percent white, 60.9 percent black and 1.6 percent other races.

On October 29, 1975 the Council of the District of Columbia passed D.C. Law No. 1-24 establishing an Office on Aging. Title II, Sec. 201 (d) defines the term "aged", in the District of Columbia, to mean a person 60 years of age or older. Title III, Sec. 301 establishes the Office on Aging as "the...single administrative unit, responsible to the mayor, to administer the provisions of the Older Americans Act (P. L. 89-73, as amended), such other programs as shall be delegated to it by the Mayor or the Council of the District of Columbia, and to promote the welfare of the aged."

In keeping with its mandate, the D.C. Office on Aging is the sole agency within the District of Columbia responsible for the coordination of transportation and social services for the elderly. The Office on Aging has recently implemented, through a public/private partnership with the United Planning Organization, a consolidated, centrally dispatched transportation system for the elderly and handicapped.

#### REPORT ORGANIZATION

This report is divided into seven chapters and appendices. The next five chapters (2-6) present the results and analysis of the five components

of the project: Chapter two provides the background to the study through the exploration and analysis of existing literature on the elderly as users of special transportation services; chapter three identifies the target population and socio-economic characteristics of users and nonusers of special transport services; chapter four presents the survey results from telephone interviews with providers of special transport services; chapter five examines reasons for nonutilization of services based on results of field interviews with elderly nonusers; and chapter six summarizes the results of the focused group discussions held in the community.

The final chapter to the report highlights the major findings and presents recommendations for problem solutions and guidelines for implementation. The appendices contain: complete lists of groups and organizations participating in the study and interview sites; and survey instruments used in the study.

## CHAPTER TWO

### SPECIAL TRANSPORTATION SERVICES FOR THE ELDERLY: AN OVERVIEW

Passage of the following legislation has contributed to the push for accessible transportation for the Nation's elderly and handicapped:

1. Older Americans Act Amendments of 1978 - establishing transportation as one of the priority areas and increasing funds to be spent on priority services to 50 percent of allocations under this Act;
2. Section 16(a) of the Urban Mass Transportation Act of 1964, as amended, mandating special efforts in transportation planning and design to assure effective utilization of mass transit by the elderly and handicapped;
3. Section 16(b) of the Urban Mass Transportation Act, as amended, providing capital assistance grants to non-profit organizations to provide transportation services which meet the needs of the elderly and handicapped; and
4. Department of Transportation Regulations mandating implementation of Section 504 of the Rehabilitation Act of 1973's anti-discrimination provision.

In response to the congressional demand for improvements in meeting the mobility needs of the elderly, there has been a tremendous growth in the number of special transport services throughout the United States. However, the limited capacities of the systems as well as funding restrictions limiting eligibility and trip purpose have proven to be barriers to use of special transportation (IPA, 1980; Cutler, 1979).

The 1976 report of the Select Committee on Aging, Senior Transportation-Ticket to Dignity, states that transportation or mobility problems confronting the elderly are multifaceted. Not only must the limitations of the transportation network itself be surmounted, but the factors which limit

the mobility of the elderly to avail themselves of existing transportation must also be addressed.

In examining factors which affect users and providers, this overview of special transportation services for the elderly is divided into three components:

1. Background - serves as a general discussion of major issues involved in special transportation for the elderly;

2. Demand Estimation - examines needs assessment methodologies and latent demand estimation techniques utilized in identifying target populations;

3. Cooperation and Coordination - reviews literature on barriers and constraints in the delivery of special transportation services.

The insight gained through an extensive review of relevant literature strengthened the framework for analysis of information collected from existing surveys and primary data sources.

## BACKGROUND

The concept of special transportation services for transportation handicapped persons has existed for some time. At the local level, social service agencies and voluntary organizations have been providing for some of the transportation needs of the elderly and handicapped for many decades. This has frequently been in the form of volunteers using their private cars, transporting elderly persons to and from a medical facility or a church bus used to take the elderly on a recreational outing. What is new in the concept of special transportation is the scope and extent of services, organizational and managerial formality, and the extent of coordination and integration with other systems.

While programs and special transportation services aimed at increasing the mobility of the elderly and handicapped have been expanding at a rapid rate, a gap has developed between service goals and service levels. The

Urban Consortium's Transportation Needs and Program Summary (Public Technology, Inc., 1978) concludes that any solutions considered in closing that gap must include: examination of problems posed by Federal Regulations; methodologies to predict demand for special transportation; and exploration of ways to reach elderly, handicapped and transit-dependent persons to describe available transportation services.

The multiplicity of federal regulations which govern special transportation services at the local level have often perplexed both the transportation providers and the Administrative Agencies on Aging (AAA) charged with implementing programs. Eight different federal agencies administer more than 30 programs providing significant amounts of money for transportation services (Select Committee on Aging, 1976). However, a determination of the true level of federal funding for special transportation services is at present a speculative venture. Most of the funds used to provide special transportation services are blended with funds for other kinds of activities (DHEW, 1975).

The duplicative nature of the special transportation services which evolved through the various federal funding sources has generally been recognized (IPA, Ecosometrics, 1980 DHEW, 1975). The numerous program funding sources for special transportation services have created a plethora of criteria for determining eligible user groups and expenditures. Different programs have differing definitions of elderly and handicapped (e.g. age), user eligibility requirements, permissible expenditures, etc. (These differing program requirements are discussed further in the section on coordination and cooperation). The nature of the present system has resulted in the overlapping of services to one client group while often excluding other population groups in need of transportation services. (Cutler, 1979; IPA, Ecosometrics, 1980).

Social service agencies have been at the forefront of special transportation services for the elderly. Most special transportation services have been run, either directly or indirectly through referrals, as one component of the multi-purpose social service center. However, while social service

programs seem to meet the needs of clients served, not all persons requiring transportation assistance are served by these programs (Brown, 1972).

Insufficiency of funds threatens the survival of some special transportation projects and differing interpretations of eligible expenditures limits coverage of transportation services (DHEW, 1975). Current attempts to alleviate these problems focus on coordination and cooperation in the operation of special transportation systems. In general, barriers to coordination created by federal regulation include age differentials between programs, income restrictions, health and physical condition, and geographical area of coverage. Franchise restrictions and labor negotiations on wage level differentials at the local level have also limited attempts at coordinating systems (DHEW, 1975).

The inherent weakness in demand forecasting, in terms of accuracy, has also contributed to the gap between service goals and service levels. Current planning techniques, often inadequate, may result in the underestimation of demand levels and consequently insufficient service capacity to meet transportation needs (IPA, Ecosometrics, 1980). Any attempt to narrow the gap between demand and supply must examine issues surrounding demand estimation methodology.

Central to any discussion of methodologies for predicting demand for special transportation is an understanding of what constitutes demand for services. While there is general agreement that demand represents a market expression of actual trips made and need reflects some fixed amount of travel necessary to obtain the minimum necessities, the area of desire for travel, expressed as latent demand, lacks the same consensus. It is extremely difficult to objectively differentiate between need and desire for travel (IPA, 1975). Since constraints and/or "impedence" values restrict the number of trips people can and will make, it is difficult to forecast demand because of the many variables that impinge (Popper, Notess, Zapata, 1976).

Estimates of demand for special transportation services for the elderly have evolved as a complement to traditional modelling approaches (Rosenbloom, et. al. 1981). While most urban areas have models for estimat-



ing travel behavior, the models are not usually disaggregated sufficiently to isolate travel demands of sub-population groups such as the elderly (Miller, 1976). This fragmented approach to understanding the nature of user demand has led to the application of methods with little modification for the special characteristics of older people (IPA, Ecosometrics, 1980).

Travel behavior does not alter substantially as one gets older. It is the quality as opposed to quantity that deteriorates with age (Paaswell, Edelstein, 1976). Therefore, the provision of special transportation services to meet the qualitative needs of the elderly takes on added importance. Elderly and handicapped travellers are also more like others in the socio-economic group than they are like others in the age or disability group (Rosenbloom, et. al. 1981). Similar variables affecting other population age groups, e.g. income, vehicle ownership, residential locations and availability of public transportation, also influence elderly trip rates (IPA, 1975). Improved methodologies for predicting travel demand for population sub-groups should focus on the special characteristics of these groups.

The third area of consideration for closing the gap between service goals and service levels focuses on identifying and servicing elderly populations. Although special transportation services have been expanding rapidly, many elderly are still unaware of their availability. Older persons who are aware of special programs, frequently appear to be those who need the services less (Brockway, Brockway, 1980). Many elderly who are vaguely aware of the existence of such programs do not know where or how to get the services. Hence, some form of a community outreach program would increase utilization rates among the eligible elderly who need transportation assistance.

Publicity weaknesses, where no relevant group is adequately apprised of program information, are bound to lead to service gaps (Reder, et. al., 1980). Merely disseminating data on services through the usual media or organizational channels may not be the most effective way of reaching target populations. Although individuals may hear about information from one communication channel (e.g., mass media), information received by a different communication channel (e.g., personal contact) may motivate them to use the services (Arnold, Bley, French, 1980).

While community outreach is a necessary and desirable goal, disincentives to vigorously pursuing that goal exist in many communities with limited resources. Many special transportation systems acknowledge that they have empty seats on demand responsive trips. However, they feel that the unused capacity does not necessarily constitute excess capacity for project expansion, but rather is a natural consequence of the inherent inefficiency of demand-responsive transport (IPA, 1976).

Where there is an excess of demand over supply, there is little incentive to deliberately undertake activities to increase that level of excess demand. Motivating older persons to use a system which cannot accommodate them may well be perceived by local agencies as inviting frustration and resentment. Outreach efforts aimed at identifying and actively servicing additional persons are more likely to be expanded when increased service capacity or alternatives become available.

#### DEMAND ESTIMATION

The extent of latent demand among elderly and handicapped persons for transportation services is subject to varying interpretations. The lack of consensus on travel desired among these sub-groups is found in concept definitions as well as technique. While it is generally agreed that latent demand is represented by some measurement of the difference between actual trips taken and those that might be taken under differing conditions, it is still subject to debate whether the resulting figures represent desired demand for travel or for participation in other activities.

A study on elderly and handicapped ridership patterns (Rosenbloom, et al. 1981) concludes that there is little evidence that the current travel needs of the elderly and handicapped are not being met. The authors state that the need for transportation that is sometimes expressed by these groups is more likely an expression of their desire to be more mobile, more

independent and more active. Gillan and Wachs' (1975) study of lifestyles and transportation needs of the elderly concludes that latent demand for improved transportation services is expressed by the large number of elderly in all income groups who are not travelling. However, the authors point out that improving transportation alone will not increase the mobility of the elderly.

An earlier study on transportation needs of the elderly (Markovitz, 1971) concludes that reduced physical capacity and lack of income to participate in more activities resulted in a low level of demand for public transit. This study suggests that rather than providing a high level of transit services, other needed services should be brought closer to the elderly.

Miller (1976), in "Latent Travel Demands of the Elderly and Handicapped", and Hoel, et. al. (1968), in Latent Demand for Urban Transportation, attempt to classify latent demand by type. Miller presents a hierarchical approach to latent demand. He states, that in order for a person to participate in an activity, he/she must be aware of the activity, be able to participate and desire to participate. Latent demand is the difference between existing participation rates and those that would come about through a different set of circumstances. Therefore, latent transportation demand exists whenever there is latent demand for activity participation. Miller's model distinguishes demand for non-transportation activities (implied latent demand) from latent demand for transportation (direct latent demand). Miller's approach is to disaggregate the population according to professed desire for transport participation and then to determine the potential for increased travel by the sub-groups.

Hoel (1968), et. al., identified four different types of latent demand. The two which are of interest to this study differentiate between two types of desired but unfulfilled travel. One type of demand comes about because demand cannot be met by the existing transportation system. The second exists because of other socio-economic characteristics.

Another technique for estimating travel demand uses characteristics of the services provided at the social service agency as the basis for estimat-

ing participation rates (Popper, et. al., 1976). The "attractiveness" of the services becomes the basis for demand forecasts. The planner develops estimates of trips, by purpose, using existing data and comparable data. Once the number of trips for each purpose is determined, planning then becomes a process of allocating trips by mode and estimating numbers that would switch modes.

The assumption by social service agencies that underutilization of social services is a transportation problem is not supported by objective evidence (Rosenbloom, et. al., 1981). Rosenbloom's study on ridership patterns concludes that with the exception of congregate meal services, the provision of transportation will not bring an influx of new social service clients.

Bochner and Stuart, in their 1977 study, conclude that latent travel demand appears to concentrate among transit dependent persons living in households with no automobile or with one auto and three or more adults. Car ownership and availability are the key difference between those who have latent demand for travel and those who do not. (Grey, 1978).

While low levels of perceived demand may represent an acceptance of present constraints (Bochner, Stuart, 1977), expressed desire to travel does not necessarily reflect what one would do if ideal transportation were available. Techniques of demand forecasting offer only rough approximations of travel need or desire. One may be more appropriate than another for a particular situation. If proper caution is not exercised in the use of demand estimates, then overinvestment in services and equipment may be the costly result.

Since expressed desire for travel does not necessarily translate directly into need, local communities must develop methodologies for assessing need for transit among local populations. Current needs assessment methodologies include:

1. Surveys
2. Citizen Participation
3. Secondary data analysis

Many communities use a combination of two or three techniques to develop their needs assessment projections.

The principal methods of surveying utilized in the elderly needs assessment studies are the household survey and the social service agency survey. The surveying techniques generally used include home interviews, telephone surveys and mail surveys. The survey instruments have focused on two areas, socio-economic characteristics of the target population and travel behavior.

Each of the surveying techniques used has intrinsic weaknesses. The home interview is a relatively high cost method, particularly when a large sample spread over a wide geographical area is involved. While the telephone interview offers many of the advantages of a home interview at reduced costs, it excludes people without telephones, many of whom are low-income and in need of services. Although mail surveys can be sent to a very large sample of the target group, response rates are frequently very low (Middendorf, Hassan, 1980). Motivation factors which influence who responds to the mail survey may also increase sample bias.

Surveying social service agencies and/or their clients does not yield a representative sample of the elderly in an urban area. Many elderly who are in need of transportation assistance are not clients of the organizations and agencies contacted. However, surveys of these agencies may provide a starting point for identifying eligible elderly populations.

Citizen participation mechanisms often used in needs assessment include: information dissemination, public hearings, community forums, citizen advisory committees and workshops. Many communities use a combination of information dissemination and feedback mechanisms in conjunction with surveys to determine travel needs of the elderly. While citizen participation is effective when used in conjunction with other techniques, it cannot be used effectively as the sole determinant of travel needs.

The third technique often used in needs assessment is secondary data analysis. Although the secondary data were generally collected for another purpose, the data sets are often useful in identifying target populations and some elements of travel behavior. Secondary sources frequently used in

needs assessment include: U.S. Census reports; local studies and surveys; UMTA's National Survey of Transportation Handicapped People; and, registration files for social services agencies and departments of motor vehicles. Although no single secondary source provides complete and accurate information on transportation handicapped people in a particular urban area, use of this information can reduce the cost of collecting primary data (Middendorf, Hassam, 1980).

#### COOPERATION AND COORDINATION

Fragmentation in the delivery of special transportation services has resulted in the inefficient use of limited resources. The consequences of such a fragmented approach include duplication of effort, underutilization of services and higher service costs (Cutler, 1979). While interagency cooperation and coordination have been required by most federal agencies providing funding for transportation services, the multitude of requirements among the agencies has created barriers to effective implementation of coordination activities (IPA, 1976).

Barriers to effective coordination of transportation services revolve around funding, planning and service delivery. Cutler (1979) identified several barriers within these areas:

- \* Eligibility requirements;
- \* Definition of elderly and handicapped;
- \* Services identified or defined;
- \* Geographical coverage;
- \* Methods of payment;
- \* Fees or contributions; and
- \* Service restrictions.

The various regulatory and legislative requirements of different agencies and programs have created many potential and perceived barriers to coordination of services at the local level. Cutler (1979) indicates that



most programs providing special transportation services consider such service to be a means of access to their primary service provided, e.g., health, rehabilitative and social services to client populations. Thus, while most federal programs have mandated coordination, it cannot always be readily implemented or achieved.

Although potential barriers to coordination of special transportation services do exist, they can often be overcome if there is a strong commitment to do so at the state and local level (IPA, 1976; Cutler, 1979). Still, rather than surmount perceived barriers, social service agencies often find it easier or more expedient to provide their own transportation to agency clientele (Burkhardt, 1977). Theoretically coordination may sound like a "good idea", however, implementing the concept may threaten the social service agency's control of funds, client loyalty, and visibility in the community (Cutler, 1979).

Willingness to cooperate in the coordination of special transportation services can be influenced by agency size and financial stability. Saltzman (1980) reports that agencies with long term financial security have less of a barrier to coordination than those agencies seeking such security. Potential loss of control over any source of funds may be more critical for agencies devoting much of their time to seeking grants and/or financial security.

The small social service agency with no regularly operating transportation project is more enthusiastic about coordination than the large agency with a well-established transportation program (IPA, 1976). However, IPA also indicated that agencies with transportation services apt to become the nucleus of a consolidated system are generally supportive of coordination. Since coordination would result in an expansion of services by the agencies, they are less concerned about protecting their "turf".

"Turf" issues are not often cited as a barrier to coordination by local agencies involved in the provision of special transportation services. However, Saltzman (1980) indicates that rather than expose local conflicts on "turf", many agencies emphasize externally imposed barriers (e.g., lack of funds, service restrictions, etc.) as the hindrance to coordination.



The historical development of special transportation services for the elderly as an adjunct to the provision of social services rather than to public transit has also fragmented planning for the transportation needs of the elderly. Transportation planning for the general population usually occurs in the local transportation agencies and regional planning bodies; planning for the transportation needs of elderly is often done by social service agencies and/or the local agency on aging. Adequate consideration will not be given to the transportation needs of the elderly unless all groups and agencies involved participate in a coordinated transportation planning process (IPA, 1976). Only then can the desirable extent of linkages to and balance between special transportation services and traditional transportation be determined.

Information on reasons for not using particular types of transit can be useful in establishing a proper balance between special transport services and other modes of intraurban travel. Reasons for nonutilization of transit services, in conjunction with other data, can indicate the extent to which lack of use is or is not related to specific variables (e.g. need, disability, etc.); it can also suggest possible changes to maximize the effective use of different transit options (Middendorf, Hassam, 1980).

The remainder of this paper focuses on reasons and issues involved in the nonutilization of special transportation services by the urban elderly; the extent to which lack of use relates to specific variables; and, suggested changes to improve service delivery to the elderly who are transportation handicapped.

## CHAPTER THREE

### CHARACTERISTICS OF USERS AND NONUSERS OF SPECIAL TRANSPORTATION SERVICES

In this chapter, a socio-economic profile of elderly users and nonusers of special transportation services is presented. This profile includes the composition of the population, social contacts and transportation problems.

#### METHODOLOGY

The socio-economic profiles are constructed from data contained in the raw data files for the Elderly Needs Analysis Survey completed by the Bureau of Social Science Research (BSSR) in 1978. The BSSR was contracted by the D.C. Office on Aging to collect and analyze data from a survey of the noninstitutionalized elderly, age 60 and over, living within the District of Columbia.

Using a random-digit-dialing technique, BSSR completed interviews with 1572 elderly residents in the District of Columbia. The sampling error given for this survey is approximately three percent at the 95 percent confidence level and approximately four percent at the 99 percent confidence level. A further note of caution is given by the BSSR that because of elements of pride and desired independence among the elderly, their needs may be understated.

Three questions crucial to this study were asked in the Elderly Needs Analysis Survey:

1. Does lack of transportation keep you from doing things you need or would like to do?
2. Do you have need of the kind of services offered by the transportation for the elderly programs?
3. Are you participating in the transportation for the elderly programs at the present time?

Survey forms with affirmative responses to need or participation, questions 2 and 3 respectively, were used to identify the socio-economic characteristics presented in this chapter. There were 225 respondents who indicated a

need for special transportation services and 31 who said that they participated in such programs. While the precision of the sample subset has decreased somewhat, the responses are sufficient to construct the socio-economic profile. Because of the small sample for users of special transportation, the measurement error is over seven percent.

Using selected socio-economic variables, a series of cross tabulations was completed for:

- (1) General Population - respondents indicating neither a need for nor use of special transportation services.
- (2) Users - respondents indicating both the need for and use of special transportation services.
- (3) Nonusers - respondents indicating a need for but not using special transportation services.

These profiles have been further analyzed to determine the specific variables, within these groups, which relate to the use or nonuse of special transportation services.

#### COMPOSITION OF THE POPULATION

The 1980 Census figures published by the U.S. Department of Commerce, Bureau of Census report the D.C. Population age 60 and over as 103,655. This figure is 1.5 percent less than the 1976 estimated population figures published by the Municipal Planning Office in the District of Columbia. The 1976 population estimates were utilized in the Elderly Needs Analysis Survey done by the Bureau of Social Science Research.

The elderly population in the District of Columbia, age 60 and over, represent 16.2 percent of the total population. The population age 65 and over is 11.6 percent of the total. Of those persons age 60 and over, 61.6 percent are female and 38.4 percent are male (TABLE 3-1). As the population gets older, the percentage of females increases from 57.1 percent to 73.4 percent of the total.

TABLE 3-1  
Distribution of D.C. Population 60 and  
Over by Age and Sex

AGE	MALE	(%)	FEMALE	(%)	TOTAL	(%)
60-64	12,632	(42.9)	16,821	(57.1)	29,452	(28.4)
65-69	10,757	(40.8)	15,594	(59.2)	26,351	(25.4)
70-74	7,590	(38.3)	12,253	(61.7)	19,843	(19.1)
75-80	4,657	(34.7)	8,760	(65.3)	13,417	(12.9)
80-85	2,493	(30.4)	5,716	(69.6)	8,209	( 7.9)
85+	1,696	(26.6)	4,686	(73.4)	6,382	( 6.2)
Total	39,825	(38.4)	63,830	(61.6)	103,655	(100 )

Source: U.S. Department of Commerce, Bureau of Census, 1980.

#### USERS AND NONUSERS

Of the total respondents to the Elderly Needs Analysis Survey, 13.6 percent reported a need for special transportation programs and 2 percent reported participation in such programs (TABLE 3-2). This study assumed that 98 percent of the D.C. Population age 60 and over do not use special transportation services. This assumption was necessary since only respondents indicating a need for special transportation were asked if they participated in the programs. The utilization rate for those eligible elderly who need special transportation services is 14.7 percent.

#### RACE AND SEX

The composition of the general population, age 60 and over, who do not use special transportation services is 62.5 percent nonwhite and 37.5 percent white. The distribution by sex is 61.6 percent female and 38.4 percent



male. This distribution by race and sex approximates that found in the total elderly population.

Users of special transportation in Washington, D.C. are 95.3 percent nonwhite. While only 4.7 percent of the users are white, 17.5 percent of nonusers who need transportation assistance are white (TABLE 3-3). The white population in the District of Columbia is heavily concentrated in the more affluent wards in the city where social services in general are less focused.

As reported in the data from the National Survey of Transportation Handicapped People (Grey, 1978) and other studies, transportation handicapped people are more likely to be female. The majority of users and nonusers who need special transportation services in the District of Columbia are female. A higher percentage of men who need transportation assistance use special transport services (18.4 percent) than women who need and use such services (13.6 percent).

#### HOUSEHOLD COMPOSITION

Most of the general population that does not use special transportation live either alone (30.5 percent) or with a spouse only (30.5 percent). Both users and nonusers who need special transportation services are more likely to live alone, 38.5 percent and 38.0 percent respectively, and less likely to live with spouse only, 10.3 percent and 15.4 percent respectively, than the elderly population in general. Users of special transportation are much more likely to live with relatives other than children than either the general population (17.1 percent) or nonusers who need special transportation (19.2 percent). As indicated in TABLE 3-4, very few elderly in any of the groups live with unrelated individuals. Institutionalized elderly are not included in the figures.

TABLE 3-2  
Population 60 and Over in the District of Columbia  
by Use of Special Transportation Service

<u>Total</u>		<u>General Population</u>		<u>Users</u>		<u>Nonusers</u>	
(N)	%	(N)	%	(N)	%	(N)	%
Elderly Needs Survey							
1978-105,200 <sup>a</sup>	(100)	103,081	(98.0)	2,110	(2.0)	12,201	(11.6)
1980-103,655 <sup>b</sup>	(100)	101,582	(98.0)	2,073	(2.0)	12,024	(11.6)

a Source: Total population figure - Municipal Planning Office, 1976 Estimates

b Source: Total population figure - Department of Commerce, 1980 Census

Note: Proportional distributions based on Survey distributions of Elderly Needs Analysis Survey, Bureau of Social Science Research.

TABLE 3-3  
Percentage Distribution of Elderly Users and Nonusers of  
Special Transportation Services by Race and Sex

<u>Group</u>	<u>Race</u>		<u>Sex</u>	
	Nonwhite	White	Male	Female
General Population	61.8	38.2	38.7	61.3
Users	95.3	4.7	23.3	76.7
Nonusers	82.5	17.5	17.8	82.2

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

TABLE 3-4  
Household Composition For D.C. Population 60 and Over

Household Composition	General Population %	Users %	Nonusers %
Live Alone	30.5	38.5	38.0
Spouse Only	30.5	10.3	15.4
With Children	16.4	12.8	22.2
With Other Relatives	17.1	35.9	19.2
With Unrelated Persons or Other Combinations	5.4	2.6	5.3

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

#### EDUCATION

Both users and nonusers who need special transportation have lower educational levels than the general elderly population. While 47.7 percent of the general population have not completed high school, 90.2 percent and 68.6 percent of users and nonusers who need special transportation respectively, have not completed high school. As indicated in Figure 3-1, almost two-thirds of the users of special transportation have not gone beyond 8th grade. Transportation handicapped persons in general have lower education levels than the total population (Grey, 1978).

#### HOUSING ARRANGEMENT

While Washington, D.C. is predominantly a city of renters, the elderly are more likely to own their dwelling unit. A slight majority (52.7 percent) of the general elderly population own their homes, while users of special transportation rent (65.0 percent) or live in subsidized housing

(10 percent). As shown in TABLE 3-5, nonusers who need special transportation have a higher percentage of homeownership (36.1 percent) than users, and are less likely to live in subsidized housing (3.2 percent). Many subsidized buildings for the elderly are serviced regularly by special transportation programs.

The elderly population in D.C. also tends to be rather stable. Most have lived in their present neighborhood for 10 years or more. The general elderly population has been the most stable with 72.4 percent living in their present neighborhood over 10 years. This probably reflects the higher ratio of home ownership. About half of users (48.7 percent) and 59.7 percent of nonusers, have lived in their present neighborhood over 10 years.

#### EMPLOYMENT

Respondents to the Elderly Needs Analysis Survey were asked if they were employed at the time of the interview and, if so, whether their employment was full-time or part-time. Just over 21 percent of the general population and 22.0 percent of users reported working at a job for pay, while only 6.3 percent of nonusers who need special transportation reported such employment. Of those reporting working at a job for pay, slightly more than one-half (51.3 percent) of the general population work full-time, while virtually all of the users (99 percent) and nonusers who need special transportation services (94.1 percent) work part-time. The National Survey of Transportation Handicapped People (Grey, 1978) reports that 12 percent of the general population 65 and over and 8 percent of transportation handicapped are employed. The higher percentage of employed elderly in D.C. probably reflects the inclusion of persons 60-64 years of age.

#### FINANCIAL STATUS

The Needs Analysis Survey asked respondents for their yearly household income, but 23.5 percent either didn't know or refused to answer. Since very

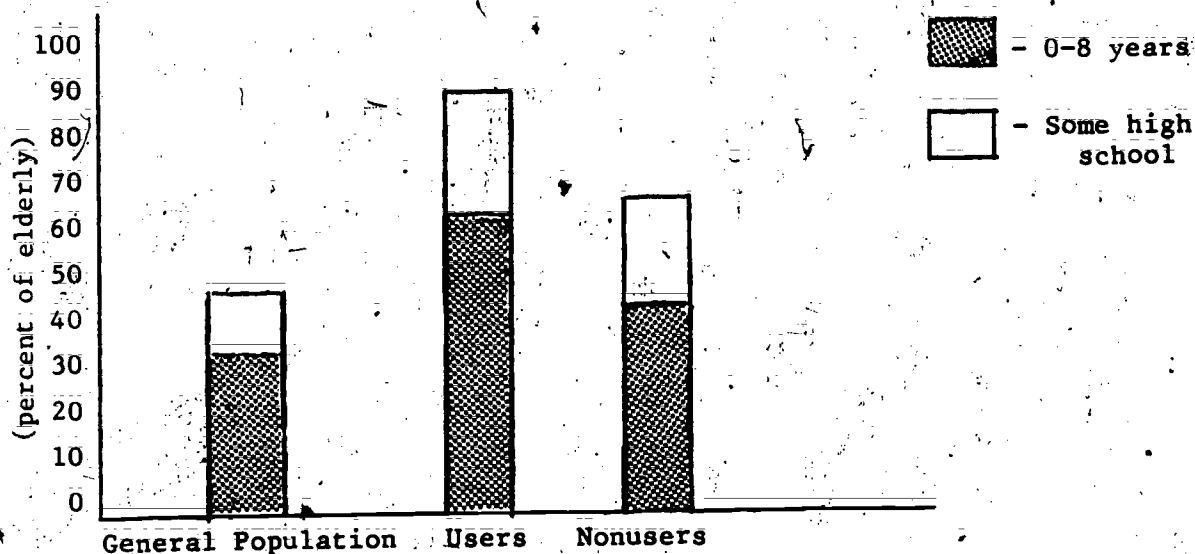


Figure 3-1  
Estimated D.C. Population Age 60 and Over  
Who Have Not Completed High School

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research, 1978.

TABLE 3-5  
Housing Financial Arrangement for D.C. Population 60 and Over

Housing Financial Arrangement	General Population %	Users %	Nonusers %
Own	52.7	25.0	36.1
Rent	44.9	65.0	60.8
Rent Free or Subsidized	2.3	10.0	3.2

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

few responses to this question were found in survey data for users and non-users who need special transportation, a disproportionate share of the non-responses must have come from these groups. Therefore, estimated yearly income for these groups cannot be provided. However, the survey did ask a question on the adequacy of income to meet needs. Responses to this question should provide a fairly accurate picture of the elderly population's perception of their financial status.

When asked how well their income met their needs, only 14.9 percent of the general population responded "not very well" or "not at all". However, 36.9 percent of users and 48.1 percent of nonusers who need special transportation services indicated that their incomes were inadequate to meet their needs. As seen in TABLE 3-6, a large percentage of elderly in all three groups perceive their incomes as fairly adequate.

TABLE 3-6  
Adequacy of Income to Meet Needs for D.C. Population 60 and Over

Adequacy	General Population %	Users %	Nonusers %
Very well	36.9	18.4	13.5
Fairly well	47.3	44.7	38.2
Not very well	12.9	31.6	40.5
Not at all	2.0	5.3	7.6

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

While a majority of the elderly perceive their incomes as adequate to meet needs, when asked whether money was a problem important to them personally there was a substantial increase in the percentages. TABLE 3-7 shows the percentage of elderly identifying money as either a very important or somewhat important problem. Although only 14.9 percent of the general

population, 36.0 percent of users and 48.1 percent of nonusers who need special transportation indicated that their incomes were inadequate to meet needs, 30.9 percent, 60.5 percent and 67.9 percent, respectively, stated that money was an important problem to them. A significant number of those who perceive their incomes as fairly adequate are apparently still having some financial difficulties.

TABLE 3-7  
Estimated D.C. Population 60 and Over Identifying Money as a  
Problem Important to Them Personally

Degree of Importance	General Population %	Users %	Nonusers %
Very Important	12.8	26.3	43.3
Somewhat Important	18.1	34.2	24.6
Total	30.9	60.5	67.9

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

#### IMPORTANT PROBLEMS

Respondents to the Needs Analysis Survey were asked to identify various problems important to them personally. Only problems identified by at least 2 percent of the elderly were included in the survey results. TABLE 3-8 shows the rankings for problems identified by each group. While money and crime are the two most important problems for the general population, money and transportation are the most important problems for users and nonusers who need special transportation. A larger percentage of nonusers who need special transportation identified each problem as important to them personally, with transportation heading the list. Lack of transportation and money have apparently reduced access to medical and dental care.

TABLE 3-8

Estimated D.C. Population 60 and Over Identifying Various Problems  
Important to Them Personally

SERIOUS	General Population %	Users %	Nonusers %
Money	30.9	60.5	67.9
Crime	16.1	18.4	23.2
Transportation	12.5	33.4	69.9
Dental Care	12.0	10.2	41.0
Health Care	10.3	23.1	27.3
Housing	6.3	12.9	18.1

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

#### SOCIAL CONTACTS

The elderly in the District of Columbia do not perceive themselves as isolated. Over 80 percent regularly participate in religious services, 72.9 percent are registered to vote and only 8.9 percent report a need for assistance with recreation and socialization activities. However, if we take a closer look at users and nonusers of special transportation a slightly different picture emerges.

Figure 3-2 shows that while only 8.2 percent of the general population report a need for assistance with recreation and socialization activities, 44.9 percent of users and 43.0 percent of nonusers who need special transportation services report a need for such assistance. Virtually all respondents who need assistance in socialization and recreation are transportation handicapped. Without such assistance they may very well be isolated.



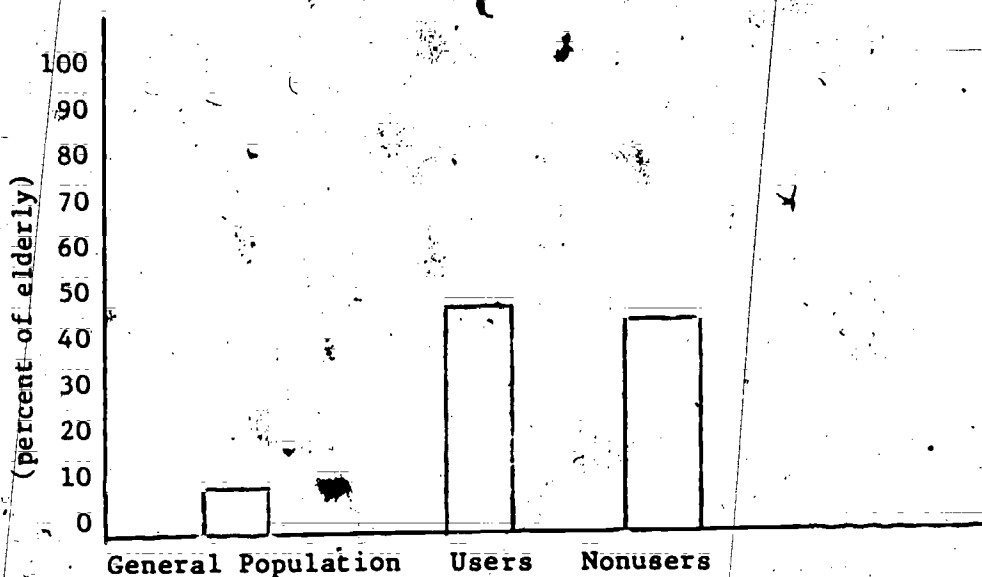


Figure 3-2

Estimated Percentage of D.C. Population 60 and Over  
Who Report a Need For Recreation and Socialization Activities

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

The percentage of D.C. elderly who belong to clubs and organizations is shown in Figure 3-3. Users of special transportation show the highest membership in clubs and organization at 41.5 percent. Nonusers who need special transportation are only half as likely (21.8 percent) to belong to clubs and organizations as users of special transportation. The elderly in general have a membership rate of 29.9 percent.

Voter registration rates are generally higher among the elderly than in the population as a whole. While voter registration is relatively high among respondents to the survey, there are significant differences in rates between users and nonusers of special transportation. As shown in Figure 3-4, users of special transportation have the highest rate of voter registration at 82.5 percent versus 64.2 percent for nonusers who need special transportation and 72.7 percent for the elderly in general.

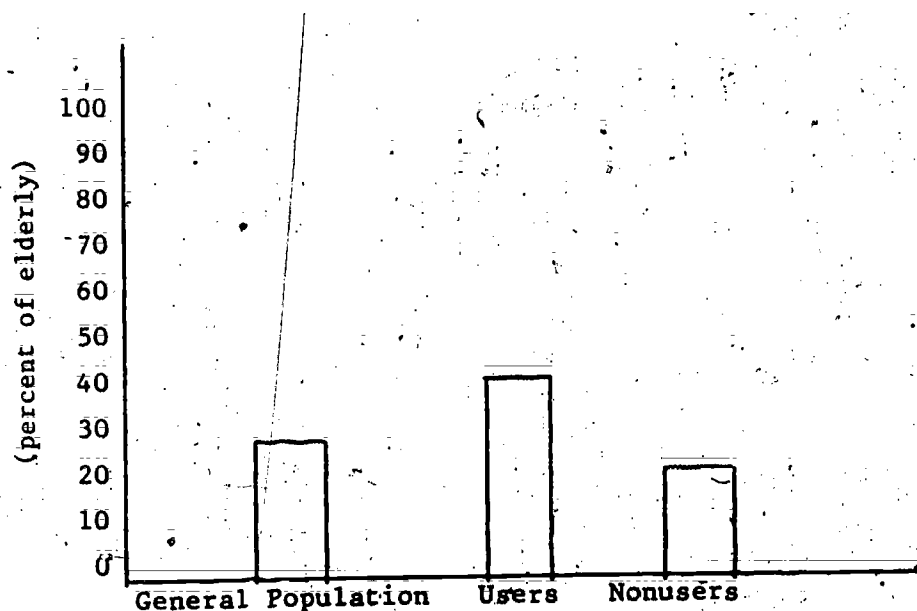


Figure 3-3  
Estimated Percentage of D.C. Elderly  
Who Belong to Organizations and Clubs

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research, 1978.

Respondents to the survey were also asked if they have a physical handicap which prevents them from doing everything they would like to do. The types of handicaps cited by respondents to the survey include:

Arthritis	Broken Bone
High Blood Pressure	Operation
Poor Eye Sight	Unspecified Infirmities
Heart Trouble	A Combination
Diabetes	
Stroke	
Old Age Infirmities	



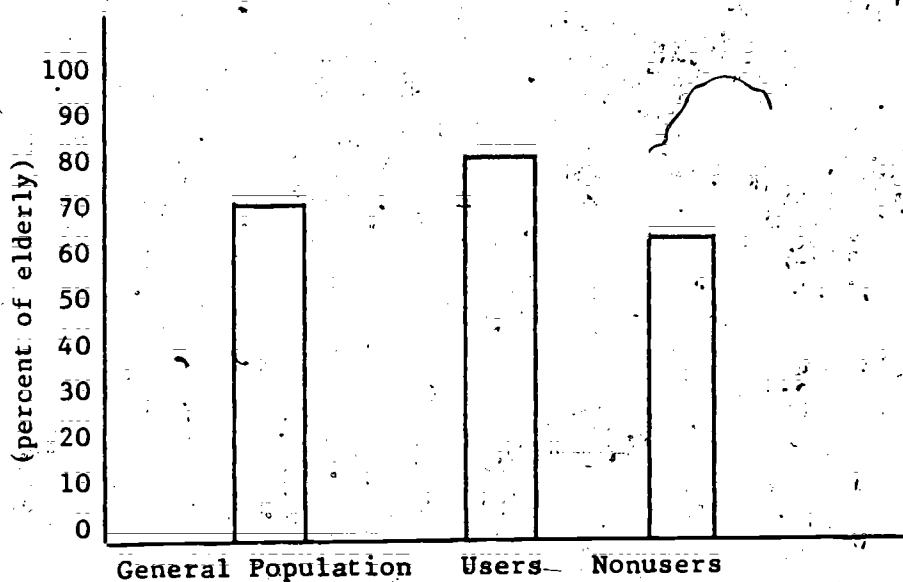


Figure 3-4  
Estimated Percentage of D.C. Elderly  
Who Are Registered to Vote

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

Figure 3-5 gives the percentages of elderly in each group who gave an affirmative response to the question on physical handicap. Nonusers of special transportation reported the highest rate of physical handicap at 68.6 percent, while 53.7 percent of users and 30.8 percent of the general elderly population reported a physical handicap.

#### TRANSPORTATION PROBLEMS

Respondents to the Elderly Needs Analysis Survey were asked several transportation specific questions. As indicated earlier in this chapter, survey forms with affirmative responses to questions on the need for special transportation programs and participation in special transportation programs were cross-tabulated with the variables presented here.

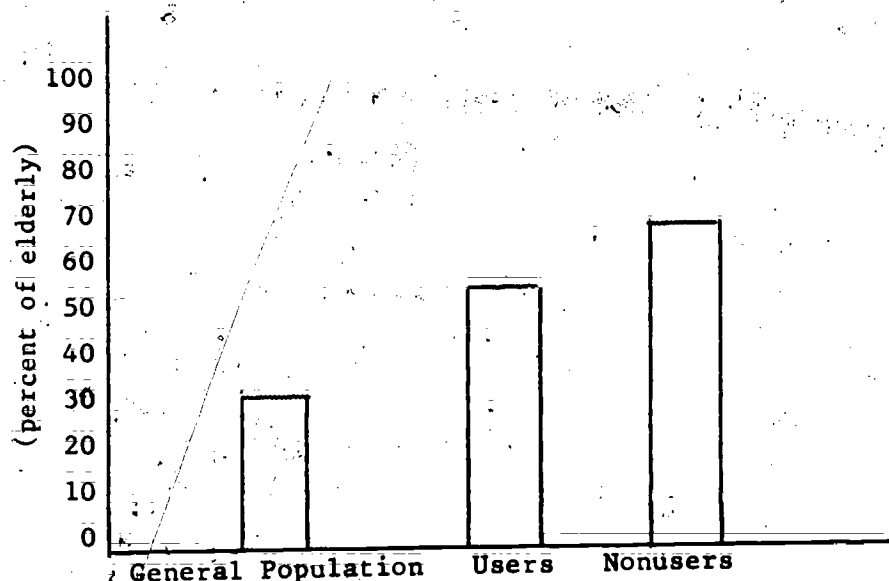


Figure 3-5

Estimated D.C. Population 60 and Over  
Who Say They Have a Physical Handicap Which Prevents Them From  
Doing Everything They Would Like to Do

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

D.C. elderly were asked whether the lack of transportation keeps them from doing things they need or would like to do. As illustrated in Figure 3-6, there is a high level of perceived latent demand among users and non-users who need special transportation services. Of the general population who do not use special transportation, 15.8 percent indicated lack of transportation as an impediment to activities, while 36.6 percent of users and 59.1 percent of nonusers who need special transportation so stated. While some of the travel demand of users have been satisfied by special transportation service, a significant level of perceived demand is apparently still unmet.

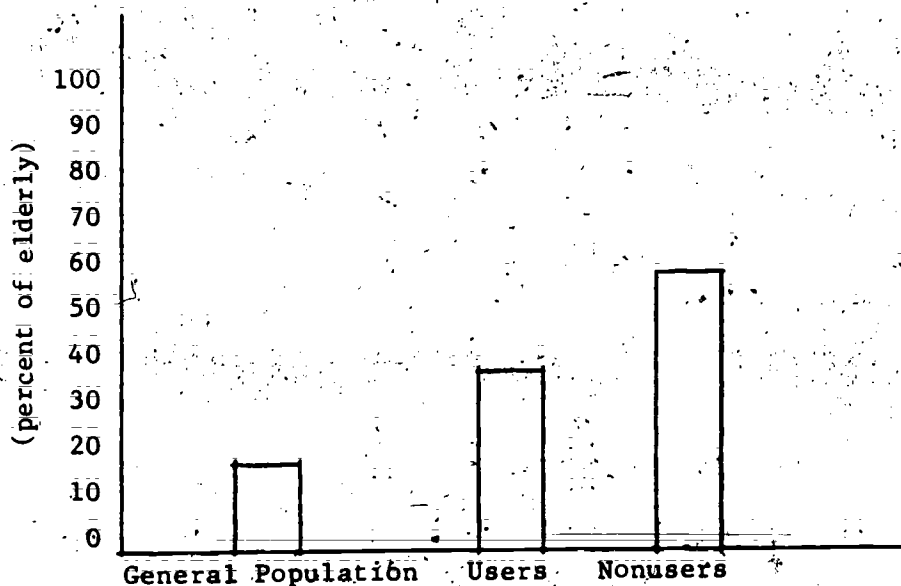


Figure 3-6

Estimated Percentage of D.C. Elderly Who Say Lack of Transportation  
Keeps Them From Doing Things They Need or Would Like To Do

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

Respondents to the survey were also asked whether transportation was a problem important to them personally and, if so, how important. There was a slight decrease (3.3 percent and 3.2 percent respectively) between the percentage of elderly in general and users who lack transportation and those who view transportation as a problem important to them personally. However, as seen in TABLE 3-9, there was a significant increase (10.8 percent) in nonusers who need special transportation who view transportation as a problem important to them personally. Those nonusers who need service but have been able to find alternatives have apparently done so with some difficulty.

TABLE 3-9

Estimated Percentage of D.C. Elderly Identifying Transportation  
as a Problem Important to Them Personally

Degree of Importance	General Population %	Users %	Nonusers %
Very Important	4.0	10.3	26.9
Somewhat Important	8.5	23.1	42.9
Total	12.5	33.4	69.9

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

In order to assess the adequacy of public transportation for the elderly in D.C., respondents were asked whether or not they could get to most of the places they wanted to go using public transportation (excluding taxis). As indicated in Figure 3-7, many of the elderly cannot get to most of the places by using public transportation. While public transportation is inadequate for 17.8 percent of the general elderly population, 31.7 percent of users and 39.9 percent of nonusers who need special transportation cannot use this mode.

Respondents who indicated that they could not get to most places they wanted to go using public transportation were asked to give reasons. As shown in TABLE 3-10, inability to access buses and subways is still the major reason cited for nonuse of public transit by the elderly. Secondary reasons vary according to the group of respondents with "Buses or subways don't go where you want to go" ranking second among the general population; "Buses and subways are too far from home" ranking second among users of special transportation; and "Rides too dangerous or too rough" ranking second among nonusers who need special transportation services.



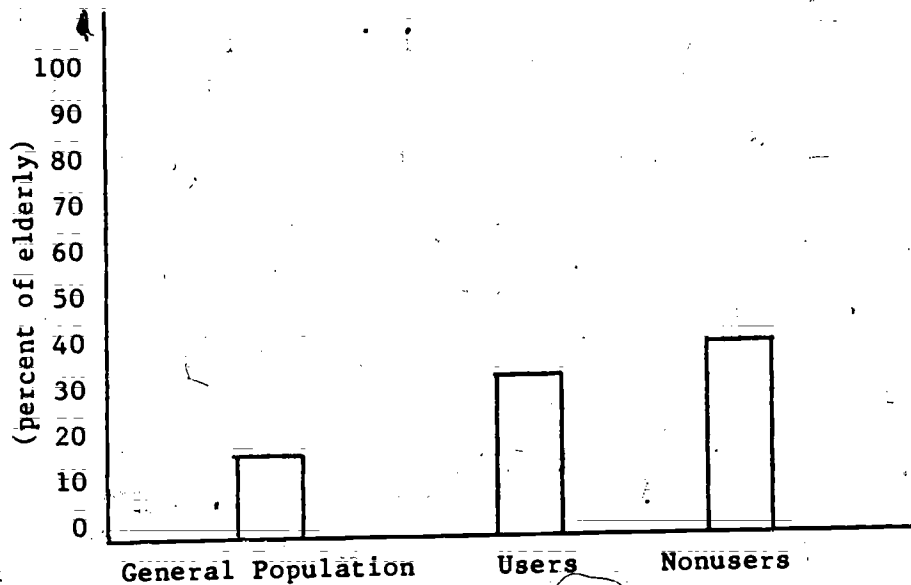


Figure 3-7

Estimated D.C. Elderly Who Cannot Get To Most of The  
Places They Want To Go Using Public Transportation

Source: Elderly Needs Analysis Survey, Bureau of Social Science  
Research.

TABLE 3-10  
Reasons D.C. Elderly Cannot Get Where  
They Want To Go Using Public Transportation

Reasons	General Population %	Users %	Nonusers %
Public Transportation is too Expensive	14.3	36.4	24.2
Buses or Subways are too far from Home	21.8	61.5	21.9
Buses or Subways Don't go Where you Want to go	35.2	45.5	31.6
It's too Difficult to get on or off Buses or Subways	48.8	75.0	75.8
The Rides are too Dangerous or it's too Rough	23.4	27.3	39.4
Don't Know how to use the System	13.5	23.1	14.7

Source: Elderly Needs Analysis Survey, Bureau of Social Science Research.

## SUMMARY PROFILE

The relationships between variables were analyzed for those persons age 60 and over who indicated a need for special transportation services; for the general population age 60 and over who do not use special transportation; and for users and nonusers who need special transportation services. The following lists provide selected summary profiles of:

- (1) Socio-economic characteristics of those who need special transportation compared to the general elderly population;
- (2) Socio-economic characteristics of nonusers compared to users; and
- (3) Socio-economic characteristics of users compared to nonusers.

In comparison with the general elderly population, those persons aged 60 and over who need special transportation services are more likely to:

- \* Be a minority and female;
- \* Live alone or with related individuals other than spouse;
- \* Have lower education and employment levels;
- \* Have inadequate income and money problems;
- \* Rent their dwelling unit;
- \* Have lived in the neighborhood less than 10 years;
- \* Be in need of social contacts;
- \* Be a nonvoter;
- \* Be handicapped;
- \* Lack transportation;
- \* Be unable to use public transportation;
- \* Consider public transportation too dangerous or too rough.

However, in comparison to users of special transportation, the profile of nonusers changes. Users and nonusers of special transportation are both just as likely to be minority, female, live alone, consider money a problem and have difficulty getting on or off buses and subways.

Nonusers of special transportation services are more likely than users to:

- \* Live with children;
- \* Own their dwelling unit;
- \* Have lived in the neighborhood over 10 years;
- \* Have inadequate income to meet their needs;
- \* Consider transportation a serious problem;
- \* Be physically handicapped;
- \* Lack transportation;
- \* Be unable to use public transportation;
- \* Have unmet health and dental needs;
- \* Consider public transportation too dangerous or too rough.

Users of special transportation services are more likely than non-users to:

- \* Live with relatives other than spouse and/or children;
- \* Live in subsidized housing;
- \* Be employed part-time;
- \* Have low education level;
- \* Belong to a club or organization;
- \* Vote;
- \* Live too far from buses and subways.

## CHAPTER FOUR

### CHARACTERISTICS OF PROVIDERS OF SPECIAL TRANSPORTATION SERVICES

Special transportation services in the District of Columbia are provided through private nonprofit organizations, public agencies, educational institutions and private-for-profit groups. Research objectives for this study included the identification of problems encountered by these providers in reaching and servicing the eligible elderly population in the city. This chapter presents the analysis of survey results.

#### METHODOLOGY

The city's current inventory listing of special transportation services and the Directory of Special Transportation Services published in 1981 by the Metropolitan Washington Council of Governments were used to identify providers for indepth interviews. All providers identified were initially contacted by letter explaining the nature of the study and requesting their cooperation. Follow-up telephone calls were made to contact persons at each service to schedule a date and time for the telephone interview.

A survey form was designed, by project staff, to ascertain why eligible elderly, in the aggregate, underutilize available special transportation services. The survey instrument (see Appendix A) was designed to examine three crucial areas:

1. Characteristics of the service provider (public, private non-profit, private-for-profit) and nature of service provided (trip purposes, type of scheduling, etc.);
2. Whether the service is underutilized or not and possible reasons for underutilization; and

3. Problems encountered in providing special transportation services to the elderly and efforts that are being taken to solve problems.

In addition, the 1981 COG directory contains service provision characteristics for each provider. Project staff verified the accuracy of the listed information before conducting each interview.

The draft survey instrument was pretested to determine the adequacy of the form. Two of the forty-three providers identified were randomly selected for the pretest. Based on results from the pretest, slight modifications were made to the survey instrument before proceeding with the remaining interviews. The final survey form contained 25 questions and the survey was conducted over the telephone between November, 1981 and January, 1982.

#### RESPONSE

Twenty-seven of the remaining forty-one providers identified participated in the telephone survey for a response rate of 65.9 percent. At least two additional follow-up calls had to be made to eight of the 27 providers in order to schedule interviews. Contact was not made in the remaining 14 cases for the following reasons:

1. The organization no longer provides special transportation service for the elderly;
2. Project staff decided not to pursue contact with the organization because the thrust of its services was for groups other than the elderly (e.g. educational institutions, D.C. Society for Crippled Children); and
3. The organization could not be reached by telephone.

There were no cases where contact was made and the organization's representative refused to cooperate. In many cases cooperation was strongly evident and interest in the final project report was expressed. However, there were several cases where respondents were clearly reticent to respond

fully and gave only marginally acceptable answers. Since the questionnaire sought opinions and thoughts from respondents, in an open - ended format, any reticence had the effect of injuring the efficacy of the instrument. Fortunately such cases were few (only three).

#### ANALYSIS OF SURVEY RESULTS

The majority of providers of special transportation services in the District of Columbia are private non profit organizations (58.1 percent) followed by private-for-profit groups (23.3 percent), public agencies (9.3 percent) and educational institutions (9.3 percent). Respondents to the survey were fairly representative of the universe of providers (TABLE 4-1). Less than one percent of the clientele of the two educational institutions not included in the survey were elderly. Private-for-profit groups were the most difficult to contact. Operators of such organizations were frequently drivers also.

TABLE 4-1  
Organizations Providing Special Transportation  
Service In The District of Columbia  
(by Type)

Type of Organization	Respondents	Total
1. Private Non-Profit	16 (59.3%)	25 (58.1%)
2. Educational Institution	2 ( 7.4%)	4 ( 9.3%)
3. Public Agency	4 (14.8%)	4 ( 9.3%)
4. Private-For-Profit	5 (18.5%)	10 (23.3%)
Total	27 (100.0%)	43 (100.0%)

Source: Directory of Special Transportation Services, Metropolitan Washington Council of Governments, 1981.



## USER RESTRICTIONS

While many organizations provide special transportation services in the District of Columbia, all services are not available to all users. A varying set of users restrictions are applied by different organizations interviewed to determine user eligibility (TABLE 4-2). Only 11.1 percent of the providers report no specific restrictions on users eligible for service. Over 55 percent of providers require that transportation users be clients of the agency or programs; 51.9 percent impose age restrictions; one-third require residency in a specific neighborhood; 18.5 percent restrict use to disabled persons; and 3.7 percent impose income limitations as a condition for use. The majority of private-for-profit groups serve, exclusively, clients of specific social service agencies.

## TRIP PURPOSE

The primary trip purposes of providers of special transportation varies according to the type of organization. The primary trip purpose of private non-profit organizations and educational institutions is to and from activities scheduled by the organization (TABLE 4-3). The primary trip purpose for public agencies and private-for-profit groups is to medical or rehabilitation facilities. The predominant, secondary trip purpose is to recreational or other community based activities. Only 7.4 percent of providers, primarily private-for-profit groups, offer services with unrestricted trip purposes.

## SERVICE UTILIZATION

Respondents to the survey were asked if their special transport service was operating at full capacity. Fifty-two percent responded "yes", 41 percent indicated "no" and seven percent did not respond. All private-for-profit organizations that provide service on demand for a fee (typically \$15.00-\$35.00) responded that they were operating at less than full capacity.

TABLE 4-2

User Restrictions For Special Transportation  
Services in the District of Columbia  
(by Type of Restriction)

Organization	Age	Disability	Agency Client	Neighbor- hood Resident	In- come	None
Non-Profit	13	2	9	9	0	1
Base (16)	(81.1%)	(12.5%)	(56.3%)	(56.3%)	(%)	(6.3%)
Education	0	1	1	0	0	0
Base (2)	(0%)	(50%)	(50%)	(0%)	(%)	(0%)
Public	1	2	2	0	1	0
Base (4)	(25%)	(50%)	(50%)	(0%)	(25%)	(0%)
For Profit	0	0	3	0	0	2
Base (5)	(0%)	(0%)	(60%)	(0%)	(%)	(49%)
Total	14	5	15	9	1	3
(Base 27)	(15.9%)	(18.5%)	(55.5%)	(33.3%)	(3.7%)	(11.1%)

Source: Directory of Special Transportation Services, Metropolitan  
Washington Council of Governments, 1981.

TABLE 4-3  
Primary Trip Purpose Provided For  
By D.C. Special Transportation Services  
(by Trip Type)

Organization	To and From Agency	Medical/ Rehabili- tion	Recreation	Community Based Activi- ties	All Types
Nonprofit	11	2	1	2	0
(Base: 16)	(68.8%)	(12.5%)	(6.3%)	(12.5%)	(0%)
Education	2	0	0	0	0
(Base: 2)	(100%)	(0%)	(%)	(%)	(%)
Public	0	3	1	0	0
(Base: 4)	(0%)	(75%)	(25%)	(0%)	(0%)
For Profit	0	3	0	0	2
(Base: 5)	(0%)	(60%)	(0%)	(0%)	(40%)
Total	13	8	2	2	2
(Base: 27)	(48.1%)	(29.6%)	(7.4%)	(7.4%)	(7.4%)

Source: Directory of Special Transportation Services, Metropolitan  
Washington Council of Governments, 1978.



This group represents 18.5 percent of the sample population and 45.5 percent of those responding "no". Of the remaining providers operating at less than full capacity: one is a university that shuttles students, but very few elderly, on a scheduled university route; one organization carries mostly children; one would carry full capacity if its van was not out of service; another begins service when its vehicle is partially full; another, with considerable unused capacity, has no program to make its services known; and, lastly, a senior center must limit ridership to maximum building occupancy, thereby reducing ridership.

The main characteristic of services that operate at full capacity are services that are part of an institutional or activity focus for the elderly. Transportation services for senior citizen centers, which bring the elderly to and from the centers for socialization, education, shopping, recreation, and, in some cases to health related facilities, generally reported that their services are unable to meet the demand. Five senior citizen centers responded that they are operating at full capacity.

A cursory examination of the survey results might indicate underutilization of special transportation services by the elderly in the District of Columbia. However, upon closer examination, if we assume that profit-oriented services do not tightly fit the major thrust of this research, a different picture emerges. Underutilization, while it exists, is not a pervasive problem in the city. Given the financial status of elderly who need special transportation services, the fee structure for private-for-profit groups render their services unavailable to the individual elderly needing assistance. In general, survey responses reveal that there is sizeable unmet demand for special transportation services in the District of Columbia.

Respondents were asked what percentage of vehicle capacity is utilized on a daily basis. The median rate of utilization for all providers is 82 percent seat occupancy. Of those providers who indicated that they were not operating at full capacity, the range of seat occupancy is from 15 percent to 75 percent.

Respondents were also asked how many additional riders they could service per day. Those services not operating at full capacity indicated the number of additional passengers that would bring them up to full capacity. Figures given ranged from 5 to 200, depending upon equipment available and whether service is provided to ambulatory or non-ambulatory clientele. For most services, available unused capacity is about 15 passengers. This is because equipment is normally a seven passenger van or small bus capable of making several trips per day.

#### WILLINGNESS TO EXPAND

Respondents were questioned on their ability and willingness, respectively, to expand transportation services for the elderly. Four dimensions of service were included in each question: trip purpose, hours of operation, eligibility of users, and service boundaries. Private for profit organizations, which are not functioning at full capacity, answered affirmatively to all parts of the pertinent questions, indicating either ability or willingness or that there currently are no restrictions in a particular service dimension. Responses from private non-profit organizations were mixed. Essentially all expressed a willingness to expand services in certain relevant areas, such as expanded service boundaries or hours of operation (the organization may already be serving all trip purposes), but expressed an inability to expand due to resource limitations. Financial limitations were most widely expressed; funds for additional vehicles or to pay drivers is not available. The ability to expand service, especially by organizations which are operating at full capacity, is virtually non-existent.

Non-profit organizations which are not operating at full capacity expressed a willingness to expand service. Here again resource limitations may prevent the ability to expand services. Of course, some service dimensions, such as trip purpose, are currently served for agency clientele.

Respondents were asked under what circumstances transportation service could be rendered at other than operating hours. Many private non-profit

organizations stated that this is currently done for special recreation trips scheduled for evenings or weekends. Private-for-profit organizations will normally provide service at any hour if the trip is scheduled in advance.

Expansion of some service dimensions for some organizations is irrelevant. An example of this would be expanding hours of transportation service for a senior center that only has limited hours. Or expanding trip purpose for a hospital vehicle that picks up elderly passengers for clinic appointments.

Conclusions from responses on the willingness and ability to expand, are that, in general, there is a willingness to expand transportation services for the elderly, but due to resource limitations, the ability to do so is lacking.

#### COORDINATION OF SERVICES

About one-third of the organizations surveyed work, on an informal basis, with other agencies engaged in transportation for the elderly. Most of them work with the D.C. Departments of Recreation or Transportation or the D.C. Office on Aging. These public agencies provide buses for special recreation trips and there is no formal agreement between the parties.

Willingness and ability to enter into cooperative arrangements with other agencies was the subject of two additional questions. Nearly all organizations said they would and could, if the option were available and advantageous. Two agencies and several respondents stated that they couldn't answer for their agency. (Since these interviews were undertaken, the D.C. Office on Aging has implemented the initial phase of a coordinated, centrally dispatched, system called the Washington Elderly and Handicapped Transportation Service, WEHTS).

#### CLIENT IDENTIFICATION

Providers were asked how their organization informs the elderly that its services are available. Organizations whose services are used to capacity



normally make no special effort to let the elderly know that services are available. Because there is considerable unfilled demand, it is assumed that through "word-of-mouth" such services are widely known. Other organizations have free public service announcements on the radio, use posters, or the service may be referred by another organization. Most reported that word-of-mouth is one of the most effective ways. Private-for-profit organizations report that one of the reasons that they are underutilized may be their low visibility to the elderly. They may not be effectively using promotional techniques.

How the organization identifies potential clients was also asked. Criteria for service is normally defined by another organization or by a parent organization of which the transportation service is but one subunit. Senior citizen centers and hospital outpatient services have transportation branches. Disability related organizations often have their own transportation service.

Criteria of eligibility vary; some of those used range from the single criteria of age, for example, to single or cumulative criteria, such as place of residence, income, handicap, lacking alternative transportation, or membership in an organization. Senior citizen centers surveyed use membership in the center as their primary criterion. (see TABLE 4-2)

The elderly are not required to complete a form for most transportation services surveyed. Again, membership in, or activities related to, a parent organization will include the one-time completion of forms, in some cases including a form for transportation; consequently, forms are not completed per ride. For medicaid related services, a physician may complete a form for an elderly rider. Private-for-profit special transportation services may require a form for medicaid reimbursement and some organizations require one for insurance purposes.

#### COMPLAINTS, PROBLEMS AND SOLUTIONS

Respondents were asked several questions related to complaints, problems, and solutions. One question asked what mechanisms were used to get feedback

on transportation service from the elderly. The most frequently mentioned (by one-third of respondents) is an open discussion which is regularly scheduled as part of an organization's program. Here transportation is a part of the agenda and complaints, suggestions, or praise can be offered by the clientele. Five organizations (18.5 percent) formally or informally survey the riders for feedback. Other providers report that telephone or face-to-face complaints are received or that drivers provide feedback. However only one provider received frequent complaints from the clients. One-third have never received a complaint and 63 percent received complaints "sometimes". The foci of complaints covers a gamut of issues. Providers were asked to list the three most commonly received complaints.

Listed in order of frequency, providers have stated that scheduling and lateness are the most serious problems. The next is that the elderly are frustrated by service limitations which may be related to trip purpose, hours of operation, or service boundaries. The elderly want more transportation and more assistance from transportation staff members. Complaints received by providers are summarized in TABLE 4-4.

Providers were asked what they do to deal with the problems identified. One-third indicated that they try to solve the problem through better maintenance of equipment, better scheduling, changing personnel (drivers) or through mollifying the client through personal conversation or offering a free ride. In some cases, solutions are not attainable without new equipment or other costly action.

Respondents were asked whether drivers make suggestions for improving services. According to 44.4 percent of the providers, drivers often make recommendations; one-third indicated that drivers do not make suggestions. Providers were then asked to state the three most common recommendations made by drivers.

For the twelve providers receiving driver recommendations, the order of frequency of mention is as follows:

1. Improve equipment (add lifts, better maintenance, etc.) - mentioned 9 times.

TABLE 4-4

Types of Complaints Received By Providers of  
Special Transportation Services

Nature of Complaint	Respondents Receiving Complaints
1. Driver late	6 (22.2%)
2. Don't offer enough services/ Don't help on or off vehicles	5 (18.5%)
3. Scheduling (often return trip)	5 (18.5%)
4. Ride is Rough/Driving too Fast	4 (14.8%)
5. Client not picked up	3 (11.1%)
6. Driver rude	3 (11.1%)
7. Equipment unreliable	2 (7.4%)
8. Bus dirty	1 (3.7%)
9. Waiting in bus for other passengers	1 (3.7%)

Source: Telephone Interview With Providers of Special Transportation  
Services.

2. Better scheduling coupled with stressing the importance of clients being ready on time - mentioned 8 times.
3. Better pay and reduced hours - mentioned 3 times.
4. Reduce coverage - mentioned once.
5. Need an aide to help clients - mentioned once.

Drivers are most frustrated by vehicle limitations, scheduling and waiting/lateness problems. They also feel that they are underpaid for the hours and effort they expend. Only 7.4 percent of providers indicated that they received frequent complaints from drivers, while 25.9 percent stated that they receive complaints sometimes.

Providers were asked how they respond to driver complaints. Talking with the driver, improving scheduling and efforts to reduce territorial coverage were the responses given most frequently.

Respondents were asked to state the three most common problems they encounter in providing special transportation services to the elderly. The most frequent responses are summarized in TABLE 4-5.

Equipment problems are the most severe, followed by a related issue; having another vehicle and driver or a larger vehicle. An organization with more than one vehicle can continue to provide services during down time for one vehicle. Also, several providers expressed the need for a lift-equipped vehicle in order to be able to provide services to handicapped elderly.

Costs and scheduling problems are equally severe.

Providers were asked what they are doing to solve problems mentioned above. Five expressed little hope; money would solve their problems, such as purchasing a new van or better maintenance. Five indicated they will keep trying to solve the problem and three indicated that they will continue talking to people they feel can influence the financial environment and make changes.

TABLE 4-5  
Problems Encountered By Providers of  
Special Transportation Services

Problems Encountered	Respondents Having Problems
1. Poor Equipment/Unreliable Equipment	12 (44.4%)
2. Too few vehicles/Vehicles too Small/ Too few Drivers	7 (25.9%)
3. Vehicle Operation/Maintenance Costs	5 (18.5%)
4. Poor Booking/Scheduling/Clients for- get to cancel	5 (18.5%)
5. Client not ready	3 (11.1%)
6. Unreliable Staff	2 (7.4%)
7. None	2 (7.4%)
8. Serving all who need it	1 (3.7%)
9. Medicaid payment slow	1 (3.7%)

Source: Telephone Interview With Providers of Special Transportation Services.

## CHAPTER FIVE

### NONUTILIZATION OF SPECIAL TRANSPORT SERVICES

The transportation alternatives available to the urban elderly have expanded considerably over the last decade. Still, the travel needs of a significant number of the elderly are not being met by either public or special transportation.

Several recent studies have examined the limitations of the transportation network affecting the availability and/or operation of services. However, as stated in Senior Transportation -- Ticket to Dignity (1976), factors limiting the capacity of the elderly to utilize the existing network must also be considered. This chapter examines such limiting factors through the identification and analysis of reasons the elderly do not utilize the existing network of special transport services.

#### METHODOLOGY

Reasons for the nonutilization of available special transport services by the eligible elderly were obtained through interviews with a stratified random sample of 140 elderly persons at trip destination points throughout the city. Two limitations to this survey approach should be noted here:

- (1) By interviewing at trip destination points the isolated elderly, those unable to travel, were excluded from the survey; and
- (2) The type of destination points selected as survey sites influenced the representativeness of the sample population.

The intent of this survey was to obtain descriptive data, to be used in conjunction with other data sources, on reasons for the nonutilization of special transport services. Therefore, the researchers felt that the above limitations were within reason and that the data obtained would provide a fairly accurate description of factors influencing the nonutilization of transportation services.

Survey sites were stratified according to the location of residences of the elderly who need, but do not use, special transportation services. The Elderly Needs Analysis Survey (BSSR) was used to determine the distribution of the elderly needing transportation assistance in wards throughout the city. While overall 13.6 percent of the elderly reported a need for special transportation services, the percentage of elderly in each ward needing such assistance ranged from a low of four percent in Ward Three to a high of 26 percent in Ward Eight. The stratification of survey sites was designed to increase the representation of the elderly needing transportation assistance in the sample population.

A list of typical trip destination points of the elderly was compiled for each ward in the city. Sites identified included senior centers, nutrition programs, churches, educational programs, elderly day care centers and clinics.

Because of the length of the survey and the perceived reticence of the elderly approached by strangers, sites where the elderly were likely to be engaged in business and/or financial transactions were eliminated from consideration (i.e., shopping facilities, banks, social security offices, etc.). Fourteen of the destination points were selected as survey sites. Interviewers typically spent three to four hours at each site until the predetermined number of surveys were completed. Only the elderly freely volunteering to participate in the study were interviewed.

A survey form was designed, by project staff, to ascertain reasons for the nonutilization of special transport services by eligible elderly. The survey instrument (see Appendix B) was designed to examine four crucial areas:

1. Characteristics of users and nonusers of special transport services and their awareness and use of special transportation services;
2. Mode choices of users and nonusers of special transportation services;
3. The need for special transportation services and reasons for nonutilization; and

#### 4. General perceptions about special transportation services.

The draft survey instrument was pretested to determine the adequacy of the form. The final survey form contained 19 questions and the interviews were conducted over a two to three month period. An interpreter was used at one site where seniors were predominantly Spanish speaking.

There were a total of 136 usable survey forms out of a total 140 interviews. Approximately 23.5 percent of the survey participants drove themselves to the interview site or arrived by special transportation. These participants were only asked questions relating to their sex, age and mode of travel. More in-depth interviews were conducted with respondents who neither drove nor used special transport services to arrive at the destination point.

#### CHARACTERISTICS OF SURVEY PARTICIPANTS

The composition of the survey population by sex was 71 percent female and 29 percent male (TABLE 5-1). The general elderly population in the District of Columbia is 61.6 percent female and 38.4 percent male. However, of those elderly needing special transportation services 81.4 percent are female and 18.6 percent are male. The larger percentage of females in the sample population, in comparison to the general population, is a consequence of the stratification designed to increase the percentage of those elderly needing transportation assistance. Also, of those participants identified as users of special transportation, roughly one-fourth were male and three-fourths were female. This approximates the distribution by sex of the user population identified in the Elderly Needs Analysis Survey discussed in Chapter three.

Survey participants who were identified as nonusers of special transport services were on the average two years older than those identified as users of the services. The median age of nonusers was 69.8 years in comparison to 67.9 years for users. A little over half (53.7%) of the nonusers in the sample population were under 70 years of age. This compares almost exactly with the 53.8 percent of the general elderly population who are



TABLE 5-1

Distribution of Survey Participants By  
Sex and Use of Special Transportation Services

Sex	Total	Users	Nonusers
Male	38 (29.0%)	14 (26.4%)	24 (30.8%)
Female	93 (71.0%)	39 (73.6%)	54 (69.2%)
Total*	131 (100%)	53 (100%)	78 (100%)

Source: Survey of Nonusers of Special Transportation Services, 1982.

\*Note: Five survey forms did not indicate sex of respondents.

under 70 years of age. Two-thirds of the users of special transportation were between 60 and 69 years of age. (see TABLE 5-2)

TABLE 5-2  
Age Distribution of Survey Participants

Age	Total	%	User	%	Nonuser	%
60-64	37	(27.2)	17	(30.4)	20	(25.0)
65-69	44	(32.4)	21	(37.5)	23	(28.7)
70-74	32	(23.5)	10	(17.8)	22	(27.5)
75-79	14	(10.3)	7	(12.5)	7	(8.8)
80+	9	(6.6)	1	(1.8)	8	(10.0)
Total	136	(100.0)	56	(100.0)	80	(100.0)

Source: Survey of Nonusers of Special Transportation Services, 1982.

Respondents were asked what mode of transportation they used to arrive at the interview site. There was an almost even split among three travel modes: private auto (32.8 percent); walked (31.6 percent); and, metro bus or subway (30.1 percent). Only 1.5 percent arrived by taxi and 2.9 percent by a special transport service. As illustrated in TABLE 5-3, 20.6 percent of the elderly drove themselves, 4.4 percent were passengers in a household member's car and 8.8 percent were passengers in a car driven by a non-household member.

There were significant differences in the travel modes of the elderly identified as users and nonusers of special transportation. Elderly were classified as users if they either arrived by special transportation services or identified themselves as users (in a later question); they were classified as nonusers if they either drove themselves or identified themselves as nonusers in the survey. Over half of the nonusers (51.2 percent)

TABLE 5-3

## Mode of Travel to Destination Point

Mode	Total	%	Users	%	Nonusers	%
Drove a car	28	(20.6)	0	(0)	28	(35.0)
Passenger in Household member's car	6	(4.4)	2	(3.6)	4	(5.0)
Passenger in Non-household member's car	12	(8.8)	3	(5.4)	9	(11.2)
Taxi	2	(1.5)	1	(1.8)	1	(1.2)
Metro (Bus/Subway)	41	(30.1)	18	(32.1)	23	(28.8)
Special Transportation Service	4	(2.9)	4	(7.1)	0	(0)
Walked	43	(31.6)	28	(50.0)	15	(18.8)
Total	136	(100.0)	56	(100.0)	80	(100.0)

Source: Survey of Nonusers of Special Transportation Services, 1982.

arrived at the interview site by private auto, while only 9 percent of users traveled by that mode. Differences between users and nonusers arriving by taxi (1.8 percent and 1.2 percent, respectively) and between those using metro (32.1 percent and 28.8 percent, respectively) were not that significant. One-half of the users of special transportation services walked to the survey site indicating a close proximity to the location. Only 18.8 percent of the nonusers walked to the site. Of those persons identified as users, just 7.1 percent arrived at their destination point by special transportation services.

Interviews were terminated at this point with respondents who either drove themselves or arrived by special transportation services. The remaining 104 participants were evenly divided between users and nonusers of special transport services. These respondents were questioned about their housing arrangements.

The vast majority of these elderly lived alone (49 percent) or with a relative other than a spouse (29.4 percent). While 11.8 percent of the respondents lived with unrelated person(s), only 9.8 percent indicated that they lived with their spouse (TABLE 5-4). While users and nonusers were most likely to live alone or with other family members, nonusers were more likely to live with a spouse (13.7 percent) than were users (5.9 percent) of special transport services.

As noted earlier, Washington, D.C. is predominantly a city of renters. Nonetheless, slightly over half of the elderly own the dwelling unit. However, according to the Needs Analysis Survey (BSSR), those who need special transportation services are less likely to own and those who use special services are the least likely to own. As illustrated in Figure 5-1, among survey participants, nonusers were also more likely to be homeowners (30.6 percent) than were users (18.7 percent) of special transportation services.

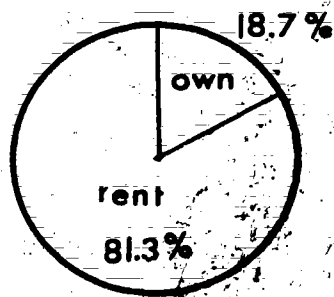
While there was a significant difference in ownership/rental ratio between users and nonusers, there was little difference in their type of housing unit (Figure 5-2). Nonusers were only slightly more likely than users, 39.2 percent to 37.4 percent respectively, to live in a single family housing unit.

TABLE 5-4

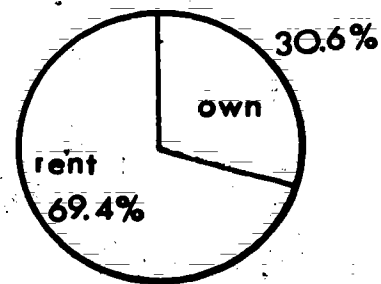
Household Composition For Participants Who Neither  
Drove Nor Used Special Transportation Services

Household Composition	Total	Users	Nonusers
Live Alone	50 (49.9%)	26 (51.0%)	24 (47.1%)
Live With Spouse	10 ( 9.8%)	3 ( 5.9%)	7 (13.7%)
Live With Other Family Member	30 (29.4%)	16 (31.4%)	14 (27.5%)
Live With Other Unrelated Person(s)	12 (11.8%)	6 (11.8%)	6 (11.8%)
Total	102 (100.0%)	51 (100.0%)	51 (100.0%)

Source: Survey of Nonusers of Special Transportation Services, 1982.



USERS



NONUSERS

Figure 5-1

Percentage of Users and Nonusers  
Who Own or Rent Their Dwelling Unit

Source: Survey of Nonusers of Special Transportation Services, 1982.

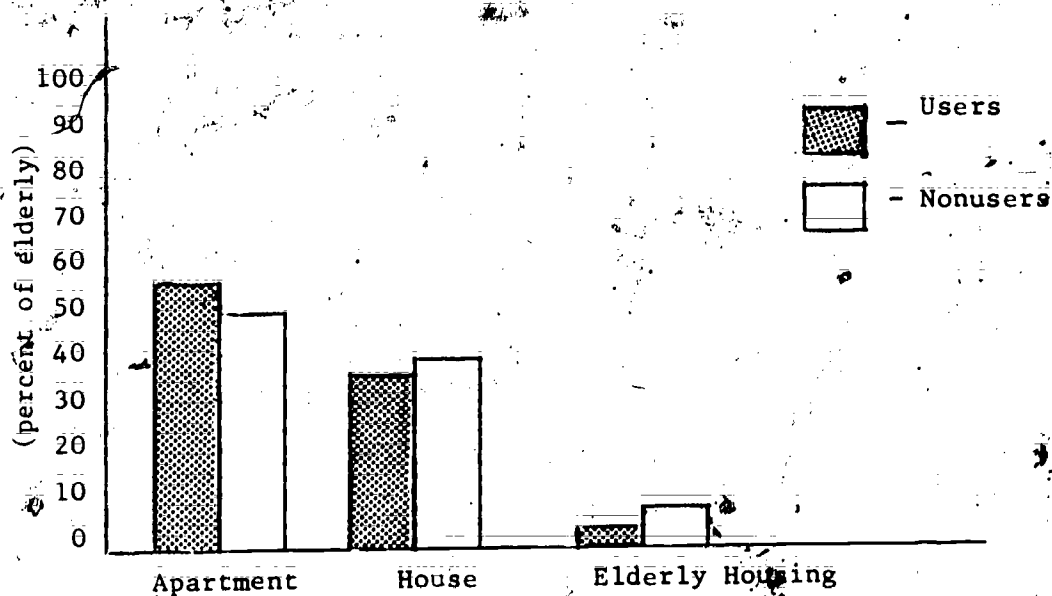


Figure 5-2

Type of Housing Unit Lived In

## TRAVEL PATTERNS

Survey participants appeared to be a fairly mobile group with over three-fourths indicating that they take five or more trips outside of the home in a typical week. However, as illustrated in Figure 5-3, nonusers of special transportation services were somewhat less mobile than users. While none of the users indicated that they took fewer than three trips per week, almost 8 percent of the nonusers take only 1-2 trips per week.

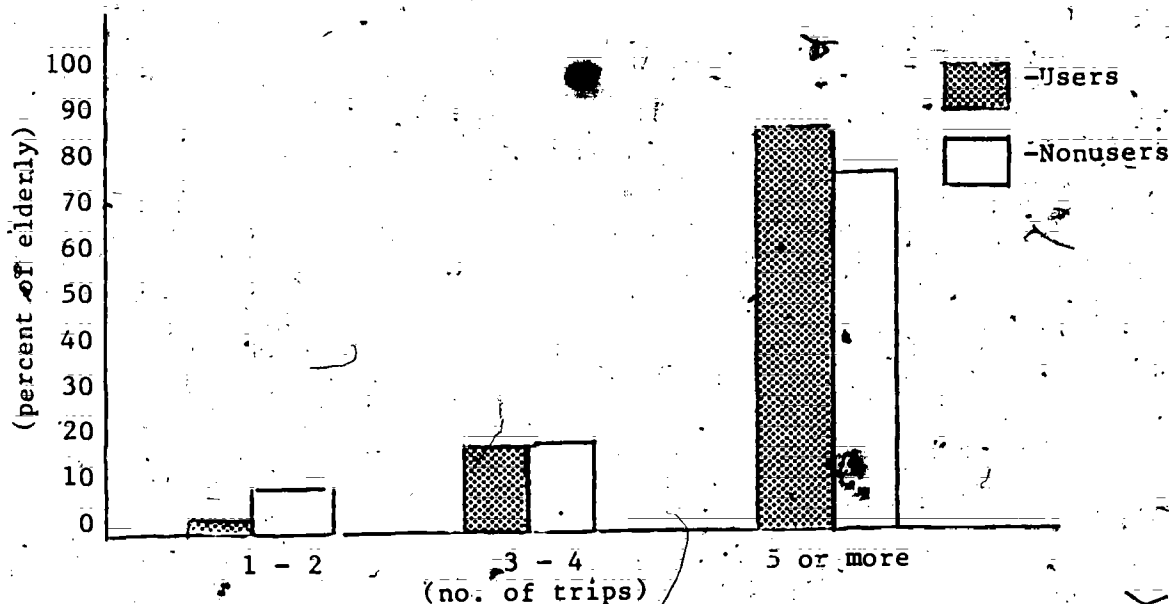


Figure 5-3  
Average Number of Trips Per Week

Respondents were asked to indicate the types of trips they usually take. Shopping, church, medical, and recreational were the predominant trip types indicated by both users and nonusers of special transportation services (TABLE 5-5). Nonusers of special transportation services were somewhat more likely than users to take shopping trips, 94.1 percent and 90.4 percent respectively, and to take church trips, 92.2 percent and 84.6 percent respec-

tively. However users of special transportation services were somewhat more likely to take medical trips, 84.6 percent and 80.4 percent respectively, and almost twice as likely to take recreational trips, 82.7 percent to 43.1 percent respectively.

TABLE 5-5  
Types of Trips Taken By Users and Nonusers

Trip Type	Users %	Nonusers %
Shopping	90.4	94.1
Work	21.6	21.7
Medical	84.6	80.4
Social	25	27.5
Recreational	82.7	43.1
Church	84.6	92.2
Other	5.9	7.8

Source: Survey of Nonusers of Special Transportation Services, 1982.

Users of special transportation services were asked for what trip types they used the special services. As illustrated in Figure 5-4, the predominant trip type for which special transportation services were used is recreation (78.8 percent) followed by travel to and from church (25 percent). Only 5.8 percent of the elderly group used special transportation services for shopping and 2.9 percent used the services for medical trips. A significant number of the user group (17.3 percent) indicated use of special transportation services for work trips. A majority of the work trips were to volunteer jobs.

The predominant use of special transportation services for recreational trips is reflected in the 2:1 ratio in the recreation trip participation.



rates of the users and nonusers of special transport.

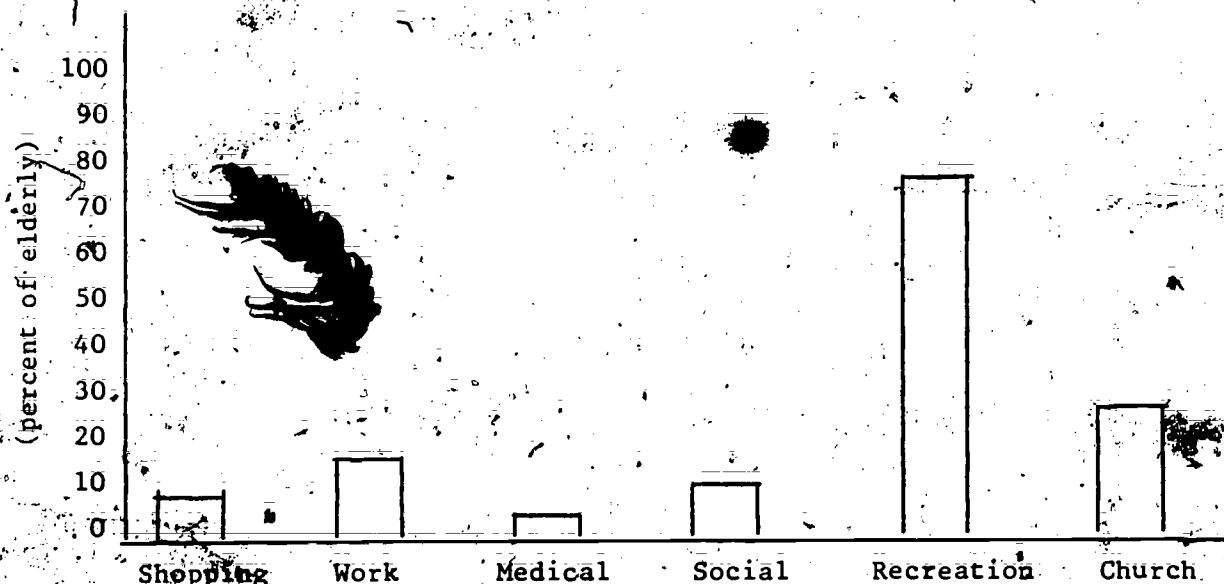


Figure 5-4  
Use of Special Transportation Services  
by Trip Type

Availability of transportation is a key to mobility for the elderly as well as other population groups. Therefore, respondents were asked how often they had transportation available to travel where they wanted to go. As shown in Figure 5-5, users of special transportation services were more likely than nonusers to have transportation available when desired and/or needed for travel. While 88 percent of users indicated that they always or usually have transportation available, just over 71 percent of nonusers enjoyed the same access to transit. Unmet desire for travel, while greater among nonusers who do not drive, still affects a significant number of users of special trans-

portation services (16 percent)

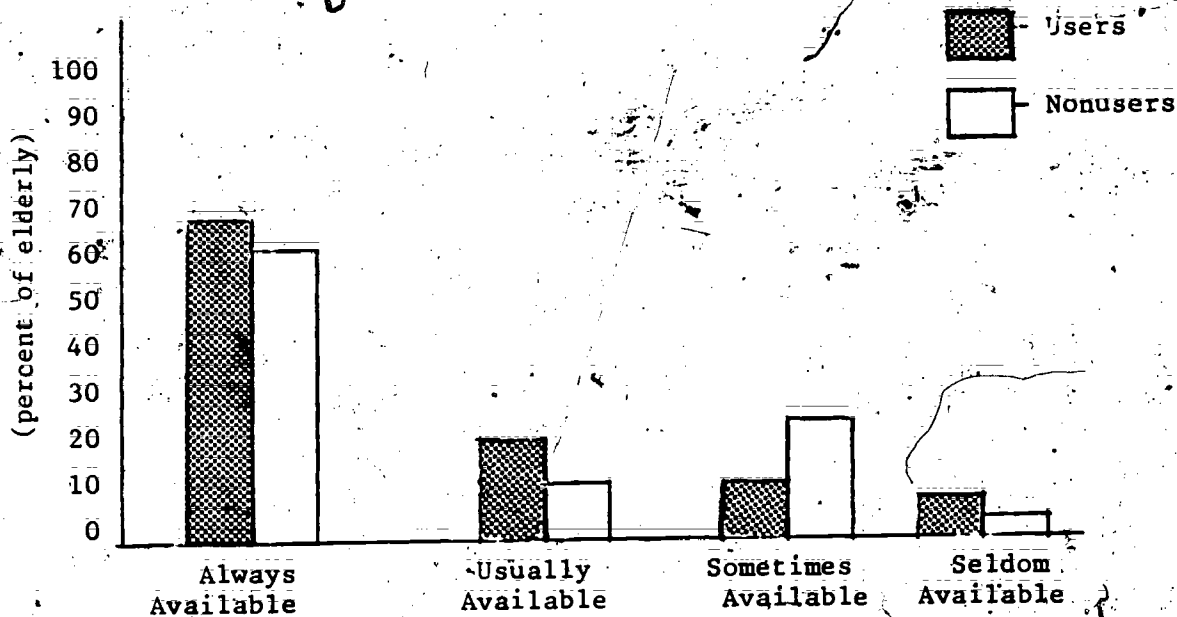


Figure 5-5  
Availability of Transportation For  
Users and Nonusers

Source: Survey of Nonusers of Special Transportation Services, 1982.

The usual mode of travel for users and nonusers of special transportation services differs significantly in only two areas: Use of Metro (bus/subway) and travel as a passenger in a private auto (Table 5-6). While nonusers are almost twice as likely as users to travel as a passenger in a private auto, users are more likely to travel by public transit. The rate of utilization of the taxi as a primary mode of travel is virtually identical for both users and nonusers of special transport service, 9.6 percent and 9.8 percent respectively.

Although twice as many users walked to the survey site, walking as a chief mode of travel is equally common among both users and nonusers of special transportation services. Less than two percent of the users indicated special transportation as their usual mode of travel.

TABLE 5-6

Usual Mode of Travel for Users and Nonusers  
of Special Transportation Services

Mode of Travel	Users (%)	Nonusers (%)
Private Auto Driver	5.8	7.8
Private Auto Passenger	17.4	31.4
Taxi	9.6	9.8
Metro (Bus/Subway)	78.8	64.7
Walk	25.0	23.5
Special Transportation Service	1.9	0

Source: Survey of Nonusers of Special Transportation Services, 1982.

Note: Percentages exceed 100.0 because some respondents gave more than one mode.

## USE OF SPECIAL TRANSPORT SERVICES

In order to use special transportation services the elderly must first be aware that such services exist. The majority of nonusers participating in the indepth interview (56 percent) were unaware of the existence of any particular special transportation service (Figure 5-6).

Nonusers, who did not drive to the survey site, were also asked if they had a need for special transportation services (Figure 5-7). Approximately one-third indicated that they did have a need for such services. The majority of the nonusers indicating a need for services (56.3 percent) were aware of the existence of special transportation programs; however, a significant minority (43.7 percent) were not aware.

Both users and nonusers who were aware of the existence of special transportation programs were asked how they learned about the services (Figure 5-9). The primary source of information about special transport services for both users and nonusers was a club or organization. However, while 84.4 percent of users learned about services through this channel of communication, only 60 percent of nonusers found out about services through this source. Nonusers were more likely than users to have learned about special transportation services through either a friend or relative or through some form of advertisement.

Nonusers who were aware of special transportation services were asked if they had ever used such services. Approximately 18 percent indicated that they had, at some point in the past, used a special transportation service (Figure 5-8). However, that was generally a one-time use for a medical or recreational purpose.

Special transportation services enjoy a high degree of support and satisfaction among both current and past users. Only five percent of all respondents who had ever used the special transportation services indicated any type of dissatisfaction with the services.

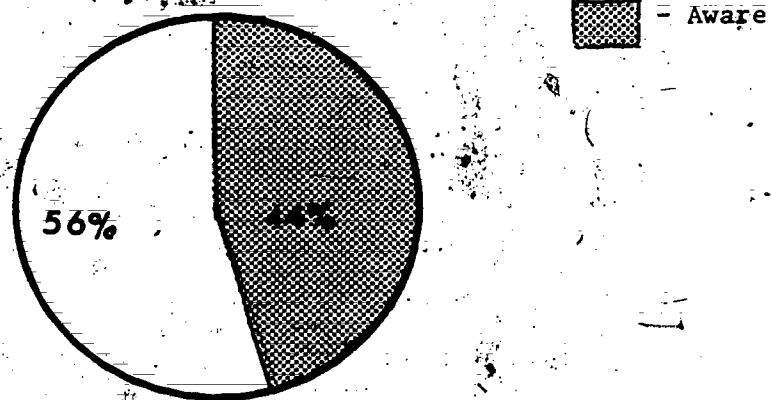


Figure 5-6  
Percentage of Nonusers Who Are Aware  
of Special Transportation Services

Source: Survey of Nonusers of Special Transportation Services.

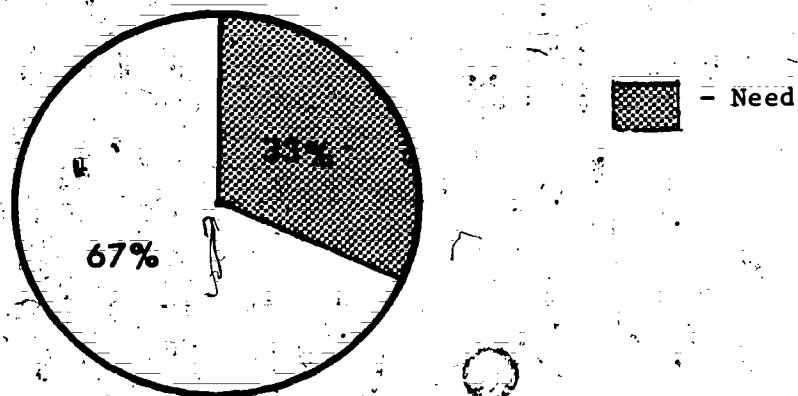


Figure 5-7  
Percentage of Nonusers Indicating A Need  
For Special Transportation Services

Source: Survey of Nonusers of Special Transportation Services.

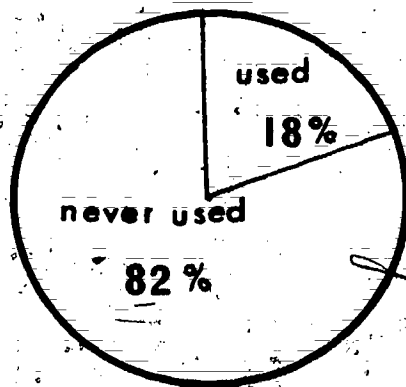


Figure 5-8

Percentage of Nonusers Who Have Used  
Special Transportation Services Previously

Source: Survey of Nonusers of Special Transportation Services.

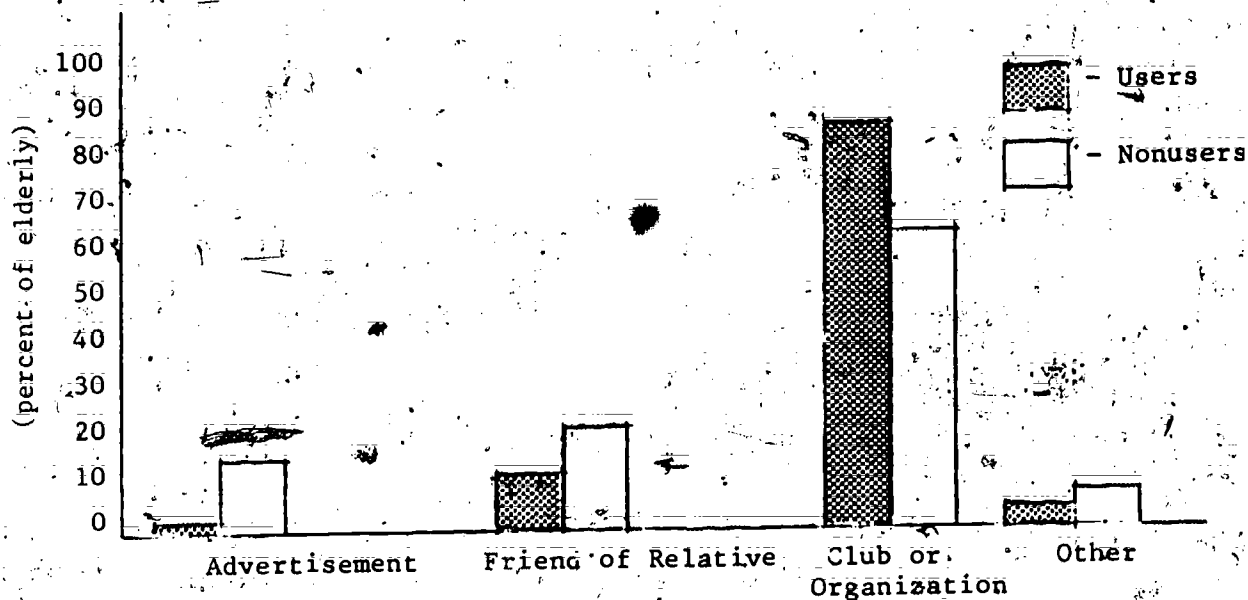


Figure 5-9

How Users and Nonusers Learned About  
Special Transportation Services

## REASONS FOR NONUTILIZATION

As stated earlier in this chapter, less than two percent of the elderly users depend on special transportation services as their usual mode of travel. Therefore, both users as well as nonusers interviewed were asked to give reasons for the nonutilization of special transport services. Interviews with the elderly who depend on special transportation services as their chief mode of travel, who arrived at the interview site by special transportation services, or who drove themselves to the site were terminated earlier in the survey. Thus, their opinions were not sought and are not included in the analysis presented below.

Reasons given for the nonutilization of special transportation services by the elderly users and nonusers can be grouped into four general categories (see TABLE 5-7):

1. Alternatives - other modes of transportation are available and adequate;
2. Knowledge - lack of information on where to get the service, who qualifies and how to apply;
3. Service Characteristics - specific attributes of services available do not meet specific needs of potential users; and
4. Pride - use of services diminishes independence and/or self-esteem.

The predominant reason for nonutilization of special transportation services is the availability of other alternatives. Approximately 60 percent of the survey participants indicated that other adequate modes of travel were available to them. Nonusers of special transportation were more than twice as likely as user to have their own transportation; users were more likely to feel that public transportation is adequate. Nonusers of special transportation, by a margin of 65.1 percent to 54.9 percent over users, felt that they had other preferable options when they needed or desired to travel.

Lack of knowledge about special transportation services was another important factor in the nonutilization of services, particularly for nonusers.

TABLE 5-7

Reason Given By Users and Nonusers For  
Nonutilization of Special Transport Services

Reason	Total %	Users %	Nonusers %
<u>Alternatives</u>			
Public transportation is adequate	32.4	35.3	30.6
Have my own transportation	20.6	13.7	28.6
Can walk where I want to go	3.9	3.9	3.9
Someone else takes me	2.0	2.0	2.0
Total	58.9	54.9	65.1
<u>Knowledge</u>			
Don't know where to get the service	20.0	9.8	28.6
Don't think I qualify	8.8	3.9	14.3
Too complicated to apply for	2.0	0.0	4.1
Total	30.8	13.7	47.0
<u>Service Characteristics</u>			
Service does not go where I want to go	4.9	3.9	6.1
Can't operate on their schedule	4.9	5.8	4.1
No space available	2.0	2.0	2.0
I like to go several places when I'm out	2.0	2.0	2.0
Services not available when I like to travel	1.0	2.0	0.0
People at the services are not helpful	1.0	2.0	0.0
Total	15.8	17.7	14.2
<u>Pride</u>			
Want to be independent	6.9	7.8	5.8
Don't want free services	2.9	0.0	5.9
Don't care for	2.9	2.0	3.9
Total	12.7	9.8	15.6

Source: Survey of Nonusers of Special Transportation Services, 1982.



While only 13.7 percent of users lacked information on services, almost half (47 percent) of the nonusers stated this as a reason for nonuse. Users of special transportation services are often aware of only one service connected to a particular senior center. They lack knowledge of alternative services when the one they're familiar with cannot meet a specific travel need (e.g. personal business).

Attributes of service were cited as a reason for nonutilization of special transportation by 15.8 percent of the respondents. Scheduling and service boundaries were the characteristics limiting the use of services by both users and nonusers of special transportation. Scheduling was more often a problem for users and service area was more of a problem for nonusers.

Pride is an important factor in the nonutilization of special services by the elderly. The desire to be independent and in charge of one's own affairs is still strong among senior citizens. When nonusers were asked under what circumstances they would use special transportation services, 14.9 percent stated none and another 25.5 percent responded only in an emergency. When asked for reasons for nonutilization 15.6 percent of the nonusers gave reasons related to pride.

Some users of special transportation services strive to maintain their independence by limiting their use of special transport services (7.8 percent). While they use this option, they are not yet prepared to accept special transport services as their principal mode of travel.

Virtually all seniors interviewed felt that special transportation services are necessary and that they should be free for those who need them. Nonusers were evenly divided over whether they felt seniors in general were aware of the availability of special transportation services. While 70 percent of the nonusers said they themselves did not need special transportation services at the present time, they want to see the services continued.



## CHAPTER SIX

### IMPROVING SPECIAL TRANSPORTATION SERVICES; ELDERLY PERSPECTIVES

A series of six focused group discussions were held, over a two month period, at various locations throughout the community. The purpose of these discussions was to learn more about special transportation needs, problems, and services as perceived by users and/or potential users of special transport services.

The exploratory nature of the group discussions was designed to provide additional insight into solution methodologies from the perspective of the elderly. Combined with the other elements of the study, these discussions were also intended to fill in knowledge gaps that still remained, clarify areas of confusion, and provide additional understanding of the transportation problems of the elderly.

#### METHODOLOGY

Project staff compiled lists of potential sites for focused group discussions throughout the community. Efforts were made to include varying types of sites and/or groups in the listing. Several different potential sites, representing a mixture of group types, were contacted. Based upon responses received, seven sites were selected to host the focused group discussions with homogenous groups anticipated at each individual site. The seventh scheduled meeting had been cancelled when project staff arrived. The host site director became seriously ill and participants were notified, by site personnel, that the meeting would not be held.

Project staff requested the assistance of the host site personnel in identifying seniors who were relatively active and in contact with other seniors. Twenty seniors were invited to each group discussion with the expectation of having an average of ten participants per group. Site personnel invited participants to six of the sites and project staff issued the invitations to the seventh group. Attendance was poorest at the group re-

ceiving invitations directly from project staff.

While the discussions were intended as exploratory, a set of questions was prepared as a guide to assure that all areas of interest were covered. Not all questions were raised at all sessions. As the discussions progressed, certain questions were covered or were rendered inapplicable. The guidelines for the focused group discussion (see Appendix C) contained sixteen questions. It covered topics grouped in the following categories:

- \* Major means of intraurban travel and travel problems
- \* Utilization of special transportation services
  - for self
  - for elderly in general
  - for special groups of seniors (e.g. handicapped)
- \* Methods for reaching seniors
- \* Perception of design for special transportation services.

A high level of agreement occurred within groups. However, different senior citizen groups expressed considerable variation in all categories listed above. Variation between groups may be attributable to the following factors:

- \* group purpose
- \* group socio-economic status
- \* group level of transportation dependency

These factors are discussed further in the analysis of the focused group discussions.

#### GROUP TYPES

Five types of groups participated in the discussion sessions. Group A consisted of seniors who lived in various scattered dwelling arrangements, generally in the same neighborhood, who met on a regular basis as a part of an organization for senior citizens (e.g. neighborhood chapter of a national organization for seniors).

Group B consisted of seniors who lived in various scattered dwelling units who attended the same church and participated in senior activities there. Seniors in Groups A and B appeared to be independent in general, including transportation; and were therefore low utilizers (if at all) of special transportation services. They appeared to be financially independent as well, in good health, aware of senior citizen issues, and active. While generally non-utilizers of special transportation, their civic-mindedness and interest in issues related to the elderly established them as strong supporters of special transportation services for the elderly (but not necessarily for themselves).

Group C was composed of seniors who lived in various scattered dwelling arrangements who may or may not have met each other before. Twenty such seniors were identified, through an institute of gerontology at a local university, and were invited by project staff to join the group discussion. This was the only group of participants invited directly by project staff and attendance was poor. The group consisted of only four members; therefore, general statements concerning utilization and attitudes are not conclusive. Participants in this group did not use special transportation services.

Group D consisted of seniors who lived in various scattered dwelling arrangements who were client/participants of a senior center. This group was basically transit dependent and heavy users of special transportation services.

Group E and Group F were composed of seniors who lived in elderly group housing or in non-age-specific multi-family housing. One additional residential site was scheduled for a group discussion, however, as noted earlier, the session was cancelled by site personnel.

It appeared that members of Group D, Group E and Group F were somewhat more dependent than elderly living in privately arranged, scattered housing, and were considerably more transportation dependent. Most persons in these groups used special transportation services, which served their housing complex in a variety of arrangements. It should be noted that locations of the two housing complexes, while in areas served by public transportation,

are removed from major activity nodes, such as shopping, health, and government centers. Members of these groups appeared less comfortable financially than the groups mentioned earlier, less healthy, and less active. Additionally, these groups were self-focused in terms of transportation; that is, they explored special transportation in terms of the needs of the discussants present (and others living in the complex) rather than in terms of what "other" seniors need.

For the sake of brevity and clarity the first three groups (A, B and C) will be referred to in the analysis as Nonusers of special transportation services and the latter three groups (D, E and F) will be referred to as Users of special transportation services. These descriptive categories describe only the use or non-use of special transportation on a group basis. Characterizations of groups as independent or dependent describe only the appearance of relative average differences, as observed by project staff, and should not be considered as absolute differences or as empirically established data.

Discussion group sizes and other statistical data are provided in the summary which follows. Specific locations and individuals are not identified here to protect group confidentiality.

TABLE 6-1 describes the number of participants and usual mode of travel for each group. In the beginning of the group discussions, participants were asked to identify their mode of travel. As the table indicates, 26.2 percent of the seniors normally travel by private automobile, whether as driver or passengers. While 53.4 percent of the nonusers usually travel by private auto, only 2.9 percent of the users do so.

Only 21.5 percent of the seniors indicated public transportation as their usual mode of transportation and all of those so indicating were members of groups who were nonusers of special transportation. While slightly more than half (52.3 percent) of the seniors usually use special transportation, 97.1 percent of the members of groups who are users of special transportation indicated this as their usual mode of travel. Special transportation services are provided, especially for social/recreational needs, to seniors at the multifamily and senior center sites.



TABLE 6-1  
Number of Participants and Usual Mode Choice  
(by group)

Group	No. of Participants	Usual Transportation Mode			
		Auto Own	Passenger	Public Transportation	Special Transportation
<u>Nonusers</u>					
Group A	16	9	2	5	0
Group B	10	1	2	7	0
Group C	4	1	1	2	0
Subtotal	30	11 (36.7%)	5 (16.7%)	14 (46.7%)	0
<u>Users</u>					
Group D	14	0	0	0	14
Group E	5	0	1	0	16
Group F	16	0	0	0	16
Subtotal	35	0	1 (2.9%)	0	34 (97.1%)
Total	65	11 (16.9%)	6 (9.2%)	14 (21.5%)	34 (52.3%)

Source: Focused Group Discussions, 1982.

The average age of the group for which data is available (TABLE 6-2) is approximately 70 years. This was derived by assuming that categories within an age group are the means for that group (e.g.: 60-64=62 years). There is no substantial difference between average ages of users and non-users of special transportation services.

TABLE 6-2  
Average Age of Participants in  
Focused Group Discussions

Age	Nonusers		Users	
	Number	Percent	Number	Percent
60-64	4	18	6	30
65-69	7	31	5	25
70-74	6	27	3	15
75-79	3	14	5	25
80+	2	9	1	5
Totals: *	22	100%	20	100%

\*Note: Totals do not match prior totals because several elderly did not complete the identification sheet.

Groups were dominated in numbers by women but a breakdown by sex was not contained in the identification sheet. As noted in earlier chapters, women represent a majority of the elderly and are more likely to be transit handicapped and users of special transportation.

#### TRANSPORTATION PROBLEMS

Mobility is very important to the elderly. Discussants indicated that they, and the elderly in general, have to engage in intraurban travel to



take care of day-to-day needs, such as shopping, medical visits, and social needs. Most persons take care of their needs with public mass transportation (bus, subway, or both). A large number of the nonuser group participants drive their own car. Several from both groups (users and nonusers) were driven by other persons. Many of those living in congregate housing used public transportation and extensively used special transportation. Multi-unit housing for the elderly is served by special transportation.

Discussion participants who were nonusers of special transportation did not indicate that they have a transportation problem. They expressed satisfaction with their transportation choices, usually private auto or public transportation. Only a few have ever used special transportation and that was during an illness or other special condition. They expressed concern for aged citizens less fortunate than themselves; the very poor, confused, isolated, sickly citizens who have no means to get around and are unable to care for all of their needs. Several of the nonusers who drive help their isolated neighbors or fellow seniors by providing transportation or running errands. The extent of such urban "networking" -- that is, developing a community of assistance -- is not unusual, however, it is unlikely that anywhere near the level of need is being met.

User group participants were divided in their perceptions of transportation problems. In those housing developments which are well served by special transportation services, there were few problems expressed. Services might involve several shopping and other trips per week. Seniors living in developments which are less well served by special transportation services (one trip every two weeks, for example) complained about the limited services. They expressed the desire for greater frequency and variety of trips.

#### REASONS FOR NONUTILIZATION

Discussants who were nonusers of special transportation services did not need the services at this time and felt that most seniors were agile enough to get around without it. However, while they did not need the

services at this time, they expressed a concern that they might need such services, either temporarily or permanently, at some point in the future.

Other reasons cited for nonutilization of special transportation include:

- \* Lack of knowledge about such services for individuals;
- \* Boundary limitations and lack of service in single family neighborhoods; and
- \* Pride and lack of acceptance of life style changes (some seniors don't want to feel that they're accepting charity).

While these participants do not presently need special transportation, they expressed first hand knowledge of seniors in their neighborhoods and/or churches who were in need of but not participating in special transportation programs.

#### VALUATION OF SPECIAL TRANSPORTATION SERVICES

All participants placed a high value on special transportation services for the elderly, whether they used them or not. Users, of course, expressed greater familiarity with the services and expressed greater enthusiasm for the services than did nonusers.

Nonusers did not value special transportation services for themselves very highly. They do not use the services. But they valued the services very highly for elderly citizens who need and use the services. They recognize that there are isolated seniors who are not well-served by public mass transportation systems and who cannot afford frequent taxi trips. In addition, elderly whose independent functioning is limited or who are handicapped need special transportation services, according to this group. In brief, the nonusers are strong advocates of special transportation services, not for themselves but for those seniors that need it.

Elderly users expressed even more strongly the value and need for special transportation services for themselves and their neighbors. Without it, many said that they would not be able to take care of the daily and special needs

that arise. They expressed a fear that they would be isolated. Many spoke about special problems for the handicapped among their number if special transportation services were to be withdrawn. Participants noted that not enough buses are equipped with working wheelchair lifts and that new buses purchased by the D.C. Office on Aging may not accommodate wheelchairs.

#### REACHING SENIOR CITIZENS

A. Discussants in each group were asked for their opinions on how to reach seniors to let them know that special transportation systems exist. Responses given include the following communications channels:

- \* Radio and Television public service announcements
- \* News media - papers and newsletters
- \* Churches
- \* Flyers to social security offices and food stamp centers
- \* Flyers under the door
- \* Clubs and organizations
- \* Workshops in different centers

While participants acknowledged that several of these channels were currently being used, they felt they were not being used effectively. One example cited was that the time slots used for free public service announcements on radio and television were often at hours when seniors are not watching or listening.

#### IDEAL DESIGN FOR SPECIAL TRANSPORTATION SERVICES

Participants were asked to design what they would consider to be the ideal special transportation system for the elderly. They were also asked whether this system should replace or be an alternative to public transportation.

The nonusers of special transit felt that the public transportation system in Washington, D.C. was a very good one and served the needs of many of the elderly. Problems cited for seniors using public transportation included: overcrowding and lack of seats; rudeness and disrespectful behavior by other passengers; and, sometimes, long waits between buses. Still, most participants felt that special transportation should be an ancillary service for those who need it, particularly the handicapped senior.

Discussants also expressed their perceptions of problems with the present system of special transportation. Some participants felt that the present system mainly serviced senior multi-family buildings and that the elderly living in scattered site single family housing was often forgotten. Other problems identified centered around driver sensitivity to the needs of the elderly, waiting times for return trips (especially medical trips), and adequately equipped vehicles to serve the needs of the handicapped senior.

Given the problems identified, the major suggestions for an ideal or improved special transportation system are listed below:

- \* Increased service for the isolated elderly living in scattered housing - this might include a fixed route schedule with designated pick-up points throughout a neighborhood;
- \* More services for multi-family senior citizens housing;
- \* Free or reduced fare service for all seniors (one group of nonusers felt that this should apply only to seniors who need it);
- \* Increased use of school buses between the hours of 10:00 a.m. and 2:00 p.m.;
- \* Greater sensitivity of drivers to the needs of seniors;
- \* Attractive, comfortable vehicles with softer seats and handrails that extend to the side walk; and
- \* Use of more vehicles equipped with wheelchair lifts and adjustable steps.

Many discussants who use special transportation services simply expressed their need for the services as presently designed.

## CHAPTER SEVEN

### CONCLUSIONS AND RECOMMENDATIONS

The availability of alternative modes of transportation, primarily the private auto, is the principal reason for the nonutilization of special transport services by the elderly in both rural and urban areas. In urban areas, the private automobile coupled with the availability of a high level of public transportation service more than satisfies the mobility requirements of a large segment of the elderly population. However, while a large majority of urban elderly are able to travel when they desire to do so, the travel of a significant minority of the elderly are not currently being met.

The introduction of special transportation services designed to improve the mobility of older Americans has not had a significant impact on the majority of the elderly who need transportation assistance. Special transportation programs are presently reaching only 14.7 percent of the urban elderly who say they need the services that such programs provide. Therefore, in urban areas with large elderly populations, a sizeable number of the transportation handicapped elderly are still unable to travel by private, public or special transportation.

The focus of this paper has been on the socio-economic characteristics and travel patterns of users and nonusers of special transport services, and on the service characteristics of providers of special transport services. This final chapter presents the major findings and conclusions on the relationship of variables which affect the use and/or nonuse of special transportation services. Recommendations for identifying and reaching target populations not utilizing available special transport services are also presented here.

#### THE NONUSERS OF SPECIAL TRANSPORT SERVICES

In order to adequately examine the reasons for nonutilization of special transport services, the population of elderly nonusers must be further seg-



mented to include only those persons who are both eligible and in need of the services provided. A cursory examination of the travel needs of the elderly as a group often camouflages the extent of nonutilization of transportation services by the elderly who are actually in need of such services. Yet, they are the older Americans who would benefit most by services designed to increase mobility.

While recent studies have examined the characteristics and travel patterns of users and nonusers of special transport services, they have generally based their observations of nonusers on those elderly who are eligible for such programs. Since standards of user eligibility frequently differ among funding sources and providers of special transportation it is often difficult to get a precise measure of the eligible elderly population in the aggregate. Additionally, not all elderly who are eligible for special transportation services actually need the services provided.

Empirically based data have demonstrated that the principal reason for lack of utilization of special transport services is the lack of a need for the services by large number of eligible persons. However, since the elderly population with available transit options are not the primary concern here, we must further segment the elderly population to identify the characteristics of those person who need the services provided.

In comparison with the general urban elderly population, the elderly who need special transportation services are more likely to: be female and minority; be handicapped and/or "fragile" and unable to use public transportation; have lower education and employment levels; have inadequate incomes and money problems; rent their dwelling units; live alone or with related individuals other than a spouse; be a nonvoter and in need of social contact; and lack access to an auto.

Among the elderly who need special transportation services, both users and nonusers are just as likely to be female, minority, live alone, consider money a problem and have difficulties accessing public transportation. However, there are identifiable differences between those elderly who need and use special transportation and those who need but do not use the services.

Nonusers who need special transportation services have somewhat different living arrangements than users of special transportation services. Nonusers are more likely than users to live with their spouse or children, own their the dwelling unit and have longer tenure in their present neighborhood. Users are more likely to live with other relatives and to live in subsidized housing.

Nonusers of special transportation services tend to be older than users of the services. The median age of nonusers is 69.8 years in comparison to 67.9 years for users. However, while only half of the nonusers are under 70 years of age, two-thirds of the users are between 60 and 69 years of age.

In general, users of special transportation services appear to be healthier, more active and more independent than nonusers who need such services. While they have a lower education level than nonusers, users of special transportation services are more apt to be employed part-time, vote, and belong to a club or organization. Nonusers who need special transportation services are more likely than users to be physically handicapped, have unmet health and dental needs and have inadequate incomes to meet their needs.

Although nonusers who need services are more likely to travel as passengers in a private auto, they travel less frequently than users. While the majority of both users and nonusers of special transportation services use public transportation as their principal mode of travel, nonusers are less able to do so. Nonusers of special transport services often fear public transportation as too dangerous or too rough, users of special transportation services live further from buses and subways. The distance from available public transit may be a motivating factor in seeking a demand responsive door-to-door transit option.

Both the users and nonusers identified above need special transportation services. However, the need appears to be greater among those elderly who are not utilizing the services. Therefore, reasons other than need or lack of need were explored further to determine which factors limit the capacity of the elderly to utilize existing transportation services.

Reasons given for the nonutilization of special transportation services by the elderly generally fall into four categories: Alternatives available,

lack of knowledge, restrictive service characteristics and pride. Within these categories several factors differentiate the reasons given by users and nonusers of special transportation.

Many elderly who need special transportation services, both users and nonusers, consider the addition of such services as ancillary or supplementary to the existing range of alternatives available. Public transportation is often adequate or a private auto may be available for certain trip purposes and/or destinations, but not for others. For the elderly unable to use public transportation, reliance on relatives and/or friends to drive them where they need or desire to go often restricts their mobility, particularly during the winter. Nonusers who need special transportation services are more apt than users to have such travel constraints and thus take fewer trips outside the home in a typical week.

Lack of knowledge about the availability of special transportation services also limits the capacity of the elderly to avail themselves of such services. Virtually half of all nonusers who need special transportation services do not know where or how to go about getting such services. Many elderly who need the services are confused as to whether they qualify for special transportation services. Perceptions of user eligibility and trip purpose restrictions often inhibit both users and nonusers in seeking the necessary assistance. Users and nonusers of special transportation services are often aware of only one type of special transportation service. Perceptual constraints associated with that service are then applied universally.

Users and nonusers who are aware of special transportation services also cite characteristics of service as barriers to utilization. Most such barriers relate to service boundary restrictions, trip purpose restrictions and scheduling. Scheduling of return trips from medical facilities is an acute problem for some elderly. Long time for the return trip can transform a one hour outing into a day's exercise.

The element of pride as an inhibiting factor in the nonutilization of special transportation services is difficult to measure with any degree of precision. While approximately sixteen percent of the nonusers acknowledge





reasons related to pride as a barrier to utilization of special transportation services, many elderly persons camouflage this reason by emphasizing other barriers to use. The lack of acceptance of life style changes as one gets older and perceived notions of charity often prohibit seniors from seeking a service which they feel diminishes their self-esteem and self-reliance.

#### SERVICING THE NEEDS OF THE NONUSERS

The service capacity of the existing network of special transportation services is inadequate to meet the travel needs of the nonusers who need special transportation services. The median rate of utilization for all providers is currently 82 percent seat occupancy. Since 85 percent of the nonusers who need special transportation services are not currently being served, the remaining eighteen percent seat occupancy, if utilized fully, would not begin to satisfy the perceived latent demand for services.

Using the trip type estimate of latent demand identified in the National Survey of Transportation Handicapped People (Grey, 1978), 29 percent of the transportation handicapped people would take more trips if the ideal type of transportation were available. This case study identified 12,073 nonusers who need transportation services as transportation handicapped. (The 2,073 users participating in programs were excluded from this total). Applying the 29 percent estimate of latent demand, an additional 3,487 persons, at minimum, need to be serviced by special transportation at any given point in time. This represents 168 percent increase over current service levels.

Service characteristics which relate to full utilization of special transport services are cost of service and purpose of the organization providing transportation. The main characteristic of services which operate at full capacity is that they are part of an institutional or activity focus for the elderly. There is considerable unmet demand (i.e. waiting lists) for transportation services for senior centers providing socialization, education, shopping and recreation activities for the elderly.

On the other hand, profit oriented transportation services are often underutilized. However, the fee structure used for these services (often \$15.00-\$35.00 per trip) renders them technically unavailable options to the individual elderly in need of transportation assistance. These services primarily rely on service contracts with social service agencies to provide transportation to health related or rehabilitation facilities. However, this is not the predominant reason for utilization of special transportation services by the elderly in urban areas.

The D.C. Office on Aging has recently implemented a consolidated, centrally dispatched transportation system for the elderly and handicapped through a public/private partnership with the United Planning Organization. The Washington Elderly and Handicapped Transportation Service (WEHTS) will provide additional vehicles for meeting the travel needs of the elderly. However, this increased capacity will not be sufficient to close the gap between supply and demand for special transportation services.

Given the excess of demand over supply for special transportation services, there is little incentive to vigorously pursue a program of community outreach. Most providers of special transportation services follow a passive marketing approach; mainly, "word-of-mouth" and agency referrals. The D.C. Office on Aging uses mailouts to senior clubs and organizations, churches, senior centers and individual senior citizens on its mailing list and public service announcements of a telephone number to call for all senior related services.

While there is a heavy reliance on getting in touch with senior citizens through clubs and organizations the majority of seniors do not belong to such groups. The elderly who need transportation assistance most are the least likely to belong to any club or organization. However, participation in religious activities is very high among the elderly in general and even more so among the low income elderly who are likely to need transportation assistance. Therefore, the church may serve as a focal point for reaching the target population.

Users of special transportation services overwhelmingly learn about those services through a club or organization. Users are also twice as likely as nonusers to belong to these groups.

Perceptions of weaknesses in the present service delivery system of special transportation services in urban areas were expressed by the elderly. Some seniors feel that the present system focuses on delivery of services to seniors living in senior multi-family buildings at the expense of seniors living in scattered site single family housing. However, the empirical data indicate that only a small percentage of the users live in such accommodations. Other perceptual problems centered around driver sensitivity to the needs of the elderly, waiting times for return trips and adequately equipped vehicles to serve the needs of the physically handicapped senior.

### RECOMMENDATIONS

1. Service delivery agencies in urban areas must explore alternative and/or additional methods of reaching elderly persons who need transportation assistance.

Community outreach programs must move out of the passive phase which is essentially comprised of information dissemination to standard program or agency mailing lists and informal "word-of-mouth" networks. While these methods may be effective in reaching a large segment of the target population, they are ineffective in reaching a large segment of those who need services most.

One such method which should be explored is the strengthening of the church-based network of contacting seniors in need of services. The church plays an important role in lives of the urban elderly. Between 80 to 90 percent of the elderly users and nonusers who need transportation assistance actively participate in religious activities. Additionally many churches maintain outreach programs for members unable to attend regular services.

The present system of mailing notices of services available to churches on a mailing list is not sufficient. Such notices are often posted on church bulletin boards and not seen by the elderly in need of services.

The Institute of Gerontology at the University of the District of Columbia is currently involved in a project, funded through the Administration on Aging, to help persons who provide care, support and/or assistance to elders in need through church-based programs. The objectives of this particular program are... "to find out the extent to which members are providing help for elders in need and to strengthen and expand helping networks on an ongoing basis through the leadership of church members who complete a training program".

The potential for reaching the isolated elderly and those nonusers in need of transportation assistance can only be enhanced by the development and utilization of such a cadre of volunteer resource persons.

2. Service delivery agencies in urban areas should explore more effective ways of utilizing the existing transportation network to provide transportation services to the elderly in lieu of or in addition to expanding special transport services.

User-side subsidies should be examined as an alternative to expanding special transport services in the District of Columbia. Negotiated service contracts with local cab companies may provide several benefits to the local government and social service agencies. It would reduce the need for costly capital expenditures and associated costs for vehicle maintenance; and it would expand service capacity at a faster rate than could be achieved through the purchase and operation of additional vehicles. Negotiated service contracts should include service standards and the requirement for physical assistance for elderly passengers who need it in and out of the vehicle.

Van services could focus on group oriented activities (e.g. shopping, recreation), nonambulatory cases and other persons not able to use conventional transit.

3. Cooperative maintenance agreements should be explored by providers of special transportation services.

Bus and van maintenance problems can have a sizeable negative impact on special transport services for the elderly. Breakdowns prevent services from being delivered and the costs associated with proper maintenance (in the private market) are prohibitive, especially for private non-profit agencies.

While the local government has initiated a consolidated special transport system, not all providers are participating. "Turf" issues and restrictions on user eligibility, trip purpose, etc. have not been totally eliminated as barriers to coordination. However, since all vehicles must be maintained, regardless of funding sources, cooperation in this area is feasible, if based on the cost of services rendered.

The following avenues might be further examined for potential in reducing maintenance problems:

- a. Maintenance cooperative - forming maintenance associations with other services providing transportation for the elderly and other groups and either
  - establishing a maintenance garage or
  - purchasing a maintenance contract from established providers.
- b. Sharing local government maintenance facilities by contract.
- c. Seeking provisions for low-interest loans or direct subsidies from local government for the proper maintenance of vehicles.

Appendix A

THE NON-UTILIZATION OF AVAILABLE SPECIAL TRANSPORT SERVICES BY THE  
ELDERLY IN URBAN AREAS: A CASE STUDY OF WASHINGTON, D.C.

INTERVIEW GUIDE  
for  
SURVEY OF PROVIDERS OF SPECIAL TRANSPORTATION SERVICES

AGENCY \_\_\_\_\_

INTERVIEWER \_\_\_\_\_

DATE OF INTERVIEW \_\_\_\_\_

TIME OF INTERVIEW \_\_\_\_\_

Hello, my name is \_\_\_\_\_ from the University of  
the District of Columbia UMTA University Research Project on special trans-  
portation services for the elderly. You should have received our letter  
indicating we would be contacting you for a survey of selected service  
characteristics. May we proceed at this time. (If non, schedule an  
appointment for the interview).

First, I would like to review with you the data on your organization  
found in the Directory of Transportation Services published by the Council  
of Governments. Please indicate any changes. (Read data from COG Survey).

1. Is your service operating at full capacity?  
(All seats occupied)

(a) Yes \_\_\_\_ (Go to Question 4)

(b) No \_\_\_\_

If no, Why not? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. What is the Average Daily percentage (%) of passenger occupancy on your vehicles?

\_\_\_\_\_ %

3. How many additional elderly riders can you service per day?

\_\_\_\_\_

4. Are you able to expand the services offered by your agency for:

Trip Purpose (a) Yes \_\_\_\_\_

(b) No \_\_\_\_\_

If no, please explain \_\_\_\_\_

\_\_\_\_\_

Hours of Operation (a) Yes \_\_\_\_\_

(b) No \_\_\_\_\_

If no, please explain \_\_\_\_\_

\_\_\_\_\_

Expanded Service Boundaries (a) Yes \_\_\_\_\_

(b) No \_\_\_\_\_

If no, please explain \_\_\_\_\_

\_\_\_\_\_



5. Other things being equal, are you willing to expand services offered by Agency for:

Trip purpose (a) Yes ☐

(b) No ☐

If no, why not? \_\_\_\_\_

Hours of operation (a) Yes ☐

(b) No ☐

If no, why not? \_\_\_\_\_

Eligibility of Users (a) Yes ☐

(b) No ☐

If no, why not? \_\_\_\_\_

Expanded Service Boundaries (a) Yes ☐

(b) No ☐

If no, why not? \_\_\_\_\_

6. Do you work with any other agency/agencies engaged in transportation for the elderly?

(a) Yes \_\_\_\_\_

(b) No \_\_\_\_\_ (Go to Question 9)

7. In what capacity do you work with other agencies?

---

---

---

8. Is there a formal \_\_\_\_\_ or informal \_\_\_\_\_ agreement?

---

---

---

9. Other things being equal, are you willing to enter into cooperative agreements with other agencies?

(a) Yes \_\_\_\_\_

(b) No \_\_\_\_\_

---

---

---

10. Are you able to enter into cooperative agreements with other agencies?

(a) Yes \_\_\_\_\_

(b) No \_\_\_\_\_

If no, why not? \_\_\_\_\_

---

---

---

11. Under what circumstances do you render services at hours not specified as "Operating hours".

(a) None \_\_\_\_\_

(b) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. What means do you use to let the elderly know that your services are available?

(a) None \_\_\_\_\_

(b) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. If none, how do elderly clients find out about the services you offer?

(a) Don't know \_\_\_\_\_

(b) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. How do you identify potential clients?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

15. Do you require elderly riders to complete any forms as a condition of using your service?

(a) Yes \_\_\_\_

(b) No \_\_\_\_

If yes, what types of forms? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

16. What mechanism(s) do you use to get feedback, both positive and negative, from the elderly about your services?

(a) None \_\_\_\_ If none, why not? \_\_\_\_\_

\_\_\_\_\_

b) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

17. Do you get complaints from elderly riders?

(a) Never \_\_\_\_

(b) Sometimes \_\_\_\_

(c) Frequently \_\_\_\_

18. What are the three most common complaints in order of frequency?

(a) \_\_\_\_\_

(b) \_\_\_\_\_

(c) \_\_\_\_\_

19. How do you handle complaints from riders?

(a) Do nothing \_\_\_\_

(b) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

20. Do you get suggestions from drivers on improving your services?

(a) No \_\_\_\_

(b) Yes \_\_\_\_

If yes what are the three most common:

(a) \_\_\_\_\_  
(b) \_\_\_\_\_  
(c) \_\_\_\_\_

21. Do you get complaints from drivers?

(a) Never \_\_\_\_

(b) Sometimes \_\_\_\_

(c) Frequently \_\_\_\_

22. What are the three most common complaints from drivers in order of frequency?

(a) \_\_\_\_\_  
(b) \_\_\_\_\_  
(c) \_\_\_\_\_

23. How do you handle complaints from drivers?

(a) Do nothing \_\_\_\_

(b) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

24. In your opinion, what are the three problems most encountered by your organization in providing transportation services for the elderly?

(a) \_\_\_\_\_

(b) \_\_\_\_\_

(c) \_\_\_\_\_

25. What are you doing to solve them?

(a) Nothing \_\_\_\_

(b) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

THANK YOU VERY MUCH FOR YOUR COOPERATION IN THIS SURVEY.

THE NON-UTILIZATION OF AVAILABLE SPECIAL TRANSPORT SERVICES BY THE  
ELDERLY IN URBAN AREAS: A CASE STUDY OF WASHINGTON, D.C.

LIST OF SURVEY SITES

1. Downtown Clusters
2. D.C. General Hospital
3. The Catholic University
4. Christian Communities  
Committed to Change DART
5. Barney Senior Center
6. SCAMP (Barney Senior Center)
7. Mobile Care, LTD.
8. Center City Community Corporation
9. American Red Cross
10. Area "A" Community Mental Health
11. Columbia Senior Center of Family  
and Child Services
12. Friendship House Association, Inc.
13. Medico Transportation
14. Muscular Dystrophy Associations, Inc.
15. P&T Transportation
16. Southwest Community House  
Comprehensive Elderly Program
17. United Planning Organization
18. Phillip T. Johnson
19. Harvest House Senior Center
20. John A. Logan Community School  
Extended Services for the Blind and  
Visually Impaired Older Americans
21. First Baptist Senior Center
22. District of Columbia Department of  
Recreation - Senior Citizens
23. Senior Citizen Counseling and Delivery
24. Associated Catholic Charities
25. Murrays Nets Transport Service
26. Area "C" Community Mental Health Center
27. Area Transportation

Appendix B

THE NON-UTILIZATION OF AVAILABLE SPECIAL TRANSPORT SERVICES BY THE  
ELDERLY IN URBAN AREAS: A CASE STUDY OF WASHINGTON, D.C.

FIELD SURVEY OF NON-USERS OF SPECIAL  
TRANSPORTATION SERVICES FOR THE ELDERLY

LOCATION: \_\_\_\_\_

WARD: \_\_\_\_\_

INTERVIEWER: \_\_\_\_\_

DATE OF INTERVIEW: \_\_\_\_\_

TIME OF INTERVIEW: \_\_\_\_\_

Hello, my name is \_\_\_\_\_ from the University of the  
District of Columbia UMTA University Research Project on Special Transpor-  
tation Services for the Elderly. We are conducting interviews to deter-  
mine the use or non-use of special transportation services by older persons  
in Washington, D.C. All participants in the survey will remain anonymous  
and have been randomly selected.

May I interview you for this project?

(Is Respondent male \_\_\_\_\_ Female \_\_\_\_\_)

1. Are you a senior citizen, aged:

- a. 60-64 \_\_\_\_\_ d. 75-80 \_\_\_\_\_  
b. 65-69 \_\_\_\_\_ e. 80-over \_\_\_\_\_  
c. 70-74 \_\_\_\_\_

2. What type of transportation did you use to arrive here today?

- a. Drove a car \_\_\_\_\_ Own car Yes \_\_\_\_\_ No \_\_\_\_\_  
b. Passenger in a car driven by member of household \_\_\_\_\_  
c. Passenger in a car by non-member of house hold \_\_\_\_\_  
d. Taxi \_\_\_\_\_ Did you receive voucher? Yes \_\_\_\_\_ No \_\_\_\_\_  
e. Metro (Bus/Subway) \_\_\_\_\_ Do you have senior discount card:  
Yes \_\_\_\_\_ No \_\_\_\_\_  
f. Special Transportation Service \_\_\_\_\_ Identify \_\_\_\_\_



g. Walked \_\_\_\_

h. Other \_\_\_\_

(If response is a or f Thank and terminate interview).

3. Do you live:

a. Alone \_\_\_\_

b. with spouse \_\_\_\_

c. with other family member \_\_\_\_

d. with other unrelated person(s) \_\_\_\_

4. Do you rent or own your housing unit?

a. Rent \_\_\_\_

b. Own \_\_\_\_

Type of unit?

(1) Apartment \_\_\_\_

(2) Single family house \_\_\_\_

(3) Senior citizen housing \_\_\_\_

5. Which of the following trips do you take: (check all that apply).

a. Shopping \_\_\_\_

b. Work \_\_\_\_

Paid \_\_\_\_

Volunteer \_\_\_\_

c. Medical \_\_\_\_

d. Social \_\_\_\_

e. Recreational \_\_\_\_

f. Church \_\_\_\_

g. Other \_\_\_\_

6. How many trips do you usually take outside the home in a week?

a. 1-2 \_\_\_\_

b. 3-4 \_\_\_\_

c. 5 or more \_\_\_\_

B-2

7. Do you use Special Transportation Services for the Elderly for any of these trips?

a. Yes \_\_\_\_\_

b. No \_\_\_\_\_

(1) Shopping \_\_\_\_\_

(4) Social \_\_\_\_\_ (7) Other \_\_\_\_\_

(2) Work \_\_\_\_\_

(5) Recreational \_\_\_\_\_

(3) Medical \_\_\_\_\_

(6) Church \_\_\_\_\_

8. How do you usually get where you want to go? (Check all that apply)

a. Private auto \_\_\_\_\_ Driver \_\_\_\_\_ Passenger \_\_\_\_\_

b. Taxi \_\_\_\_\_

c. Metro \_\_\_\_\_

d. Walk \_\_\_\_\_

e. Special Transportation Services \_\_\_\_\_

f. Other \_\_\_\_\_

(If response is or includes e, Thank and terminate interview).

9. Do you have transportation available to travel where you want to go?

a. Always \_\_\_\_\_

c. Sometimes \_\_\_\_\_

b. Usually \_\_\_\_\_

d. Seldom \_\_\_\_\_

10. Are you aware of any special transportation services that are available to the elderly?

a. Yes \_\_\_\_\_

b. No \_\_\_\_\_ (Go to Question 14)

If yes, which one(s) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. How did you learn about the availability of special transportation services?

- a. An advertisement \_\_\_\_\_
- b. From a friend or relative \_\_\_\_\_
- c. Thru a club or organization \_\_\_\_\_
- d. Other \_\_\_\_\_

12. Have you ever used special transportation services for the elderly?

- a. Yes \_\_\_\_\_ No \_\_\_\_\_ (Go to Question 14)

If yes, which service \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. Were you satisfied with the special transportation services?

- a. Yes \_\_\_\_\_
- b. No \_\_\_\_\_

If No, please explain \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. Do you need a special transportation services program?

- a. Yes \_\_\_\_\_
- b. No \_\_\_\_\_

15. Under which of the following conditions would you use special transportation services? (Check all that apply).

- a. If I knew where and when it was available \_\_\_\_\_

- b. If its schedule met my needs \_\_\_\_
- c. If it was free \_\_\_\_
- d. If it was subsidized \_\_\_\_
- e. If it was at full cost \_\_\_\_
- f. None \_\_\_\_
- g. Other \_\_\_\_\_

16. Which of the following reasons describe why you don't use special transportation services for the elderly? (Check all that apply).

- a. Have my own transportation \_\_\_\_
- b. Public transportation is adequate \_\_\_\_
- c. Don't know where to get the service \_\_\_\_
- d. Service does not go where I want to go \_\_\_\_
- e. I can't operate on their schedules \_\_\_\_
- f. Service takes too long \_\_\_\_
- g. Too expensive \_\_\_\_
- h. Too complicated to apply for \_\_\_\_
- i. I don't think I qualify \_\_\_\_
- j. I feel that its a welfare program \_\_\_\_
- k. Service not available when I like to travel \_\_\_\_
- l. Services ask too many personal questions \_\_\_\_
- m. I like to go several places when I'm out \_\_\_\_
- n. People at the services are not helpful \_\_\_\_
- o. I don't want free services \_\_\_\_
- p. Other \_\_\_\_\_

17. With which of the following statements do you agree?

a. Special transportation services programs are necessary for others, but not for me.

(1) Agree \_\_\_\_ (2) Disagree \_\_\_\_

If disagree, please explain \_\_\_\_\_

b. Special transportation programs are necessary and should be continued.

(1) Agree \_\_\_\_ (2) Disagree \_\_\_\_

If disagree, please explain \_\_\_\_\_

c. Senior Citizens are generally aware of available special transportation services.

(1) Agree \_\_\_\_ (2) Disagree \_\_\_\_

If disagree, please explain \_\_\_\_\_

d. Special transportation services should be free for those who need to use them.

(1) Agree \_\_\_\_ (2) Disagree \_\_\_\_

If disagree, please explain \_\_\_\_\_

18. Do you live in:

a. N.W., D.C. \_\_\_\_\_

b. N.E., D.C. \_\_\_\_\_

c. S.W., D.C. \_\_\_\_\_

d. S.E., D.C. \_\_\_\_\_

19. What is the nearest intersection to where you live?

a. Streets \_\_\_\_\_  
\_\_\_\_\_

Thank you very much for your help in this research effort.

THE NON-UTILIZATION OF AVAILABLE SPECIAL TRANSPORT SERVICES BY THE  
ELDERLY IN URBAN AREAS: A CASE STUDY OF WASHINGTON, D.C.

LIST OF SURVEY SITES

1. Barney Senior Center  
1737 Columbia Road, N.W.
2. Spanish Senior Center  
1842 Calvert Street, N.W.
3. S.W. Senior Center  
900 4th Street, S.W.
4. First Baptist Senior Center  
715 Randolph Street, N.W.
5. Columbia Senior Center  
4121 13th Street, N.W.
6. Harvest House, Senior Center  
150 Rhode Island Avenue, N.E.
7. Catholic Charities  
2800 Otis Street, N.E.
8. Senior Citizen Counselling and  
Delivery  
2500 Martin Luther King Avenue, S.E.
9. Greater S.E. Community Service  
Center  
1350 Southern Avenue, S.E.
10. Downtown Cluster Day Care  
Mount Vernon United Methodist Church  
900 Massachusetts Avenue, N.W.
11. Saint Columbia's Episcopalian Church  
4201 Albermarle Street, N.W.
12. Asbury United Methodist Church  
926 11th Street, N.W.
13. Senior Companion Program  
14th and Harvard Street, N.W.
14. Mayors Breakfast for Senior Citizens  
Shoreham Hotel, N.W.

Appendix C

THE NON-UTILIZATION OF AVAILABLE SPECIAL TRANSPORT SERVICES BY THE  
ELDERLY IN URBAN AREAS: A CASE STUDY OF WASHINGTON, D.C.

GUIDE FOR FOCUSED GROUP DISCUSSION

1. How many of you drive your own car?  
How many are driven where they want to go by relative or friend?  
How many use public transportation?  
Is this a good arrangement?  
Do you prefer friends or relatives to drive you wherever you have to go?

---

---

---

---

---

2. Is it important that senior citizens be able to travel on a daily basis?  
Why?  
Where do they have to go?  
Is it as important for older people to travel as it is for younger people?

---

---

---

---

---

3. I'll bet that sometime you have wanted or needed to go somewhere but  
couldn't because of some transportation problem.  
Is this true?  
What did you do?  
What did you wish for?

---

---

---

---

---



4. Should the D.C. Government or other organizations provide special transportation services for the elderly?

Why?

Does anyone feel that special transportation services should not be provided?

Why not?

---

---

---

5. What do we mean by special transportation services?
- 
- 

6. How many of you use special transportation services for seniors?

How many do not?

How many need special transport services?

---

---

---

7. Are there important differences among the different transportation services?

Are some better than others?

Which ones?

Why?

---

---

---

8. Now I would like reasons. Of those who use, please tell us why?  
Now of those who don't use it; why not?

Do you use special transportation services, which services do you use?  
How often?  
Why?  
For what kinds of trips?

---

---

---

---

9. We have established earlier that there are important reasons for elderly citizens to be able to get around. Some people have their own car or have friends or relatives with cars. Some of you use special transportation services and others do not. In all cases, however, there is probably some frustrations; you have to get somewhere and cannot. If you could design a transportation program for seniors, what would you design? Individual chauffeur service is out; it would be too expensive. What would it consist of? What kind of service? To whom would the service be provided? What kind of vehicles? What kind of schedule? etc. How much would it cost to ride? Would there be an attendant beside a driver? You get the idea. Who wants to be first? Can we agree that this would be a desirable service? If anyone disagrees, what would you recommend? What changes would you make?
- 
- 
- 
- 
- 
- 
- 

10. How do you reach unions to let them know that this special transportation system exists? How did you know that services already exist?
- 
- 
- 
-

11. One thing we know from our research is that seniors are a very mixed group. What do you feel are the characteristics of elderly people who need special transportation services? Can we have more elaboration? What are the characteristics of those who do not? Can we have more elaboration?
- 
- 
- 
- 

12. Is it an embarrassment to need or use special transportation services? Can we have more thinking on this?
- 
- 
- 
- 

13. Has anyone in this group changed their mind about using special transportation services? What will you do? Why? Has anyone changed their minds about whether special transportation services should exist or not? Why? What do you think now?
- 
- 
- 
- 

14. Are there any other feelings or opinions that have not been dealt with? Are we leaving anything out? One thing we're leaving out. What about the isolated elderly? How do we reach them?
- 
- 
- 
-

15. One important thing I'd like to understand. Who are you? Would each person state his or her background? Who would like to begin?

---

---

---

---

---

---

---

16. Who would like to briefly summarize what we discussed and what conclusions we have reached? Is there any disagreement?

## REFERENCES

- 1) Adams, G. H. Transportation Users: Demands and Needs ( a bibliography with abstracts). Springfield, VA: National Technical Information Service; 1977 February. PS-77/0038/8ST.
- 2) Administration of Aging  
Transportation and the Elderly - Review of Research Projects, Studies and Technical Assistance Resources  
U.S. Department of Health and Human Services  
Washington, D.C., 1980
- 3) Aex, R. P. "State of the Art of Demand Responsive Transportation" in Transportation Research Board Special Reports Conference Paper No. 154  
Oakland, California, 1974
- 4) An Analysis of Transit and Paratransit Options for the Elderly and the Handicapped. Informal paper series 10. Dallas, TX: North Central Texas Council of Governments; 1978 January.
- 5) Arnold, Eugene D. Survey and Analysis of Special Transportation for the Elderly and Handicapped in Virginia, Urbanized Areas. Charlottesville, Virginia, 1979
- 6) Ashford, N.; Frank M. The Effect of Age on Urban Travel Behavior, Florida State University Transportation Center, Department of Urban and Regional Planning
- 7) Associates Incorporated for Transportation Systems Center, User-Side Subsidies for Shared Ride Taxis in Kinston, North Carolina, Charles River, for UMTA, Washington, D.C., 1980
- 8) Au, Tung; Baumann, D. M. B. "Strategies for Providing Transportation to the Elderly and Handicapped" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October

- 9) Antrey, T.; Sokolow, G; O'Farrell, M. "Estimating Demand for Specialized Transportation" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 10) Arnold, W. E.; Bley, J.; French, K. "Diffusion of Information about Special Transportation" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 11) Barley's Marketing to Metamarketing Consultants Transit Authority of Northern Kentucky Elderly and Handicapped Needs Study, 1978
- 12) Barley's Marketing to Metamarketing Consultants Cincinatti, Transit Authority of Northern Kentucky Elderly and Handicapped Needs Study, Springfield, Virginia, 1978
- 13) Bell, W. G.; Olsen, W. T. Proceeding of the Fourth Annual Florida Transportation Conference Toward A Unification of A National State Policy On the Transportation Disadvantaged, Florida State University, Department of Urban and Regional Planning, 1974
- 14) Brockway, J. M.; Brockway, T. A. "Transportation Needs of the Elderly in Kentucky" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 15) Coleman, D. M.; Graye, E. S. "Evaluation of the Metro" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 16) Coleman, D. M. and Graye, E. S.  
Negotiating the Subway by the Elderly and Handicapped  
Urban Systems Engineering, Howard University, Washington, D.C., 1979
- 17) Center For Transportation Research, Bureau of Engineering Research  
The University of Texas at Austin  
Rider Patterns in Transportation Services For the Elderly and Handicapped  
U.S. Department of Transportation, UMTA, 1981

- 18) Cutler, D. A.; Knapp, S. F. Coordinating Transportation Services for the Elderly and Handicapped, v. 2, A Model Uniform Billing and accounting System for Coordinated Transportation Systems. Washington, D.C.: Department of Transportation; 1979 May; DOT-OS-60180
- 19) David, J. P. "A Mass Transit Agency Provider Coordinated Service" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 20) DelGindice, C.; Spear, A. J. "Assessing Ridership Eligibility" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 21) Determining the Future Mobility Needs of the Elderly: Development of a Methodology. Washington, DC: Department of Transportation, 1976. Available from: NTIS, Springfield, VA; PB-262 809.
- 22) Doerflinger, M. C.; Strauss, D. "A Mechanism for Consumer Participation" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 23) Dieward, W. J.; Watkins, G. W. "Controlled Planning Games: A Public Involvement Technique" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 24) Elderly and Handicapped Public Transportation Issues: A Status Report Washington, D.C.: American Public Transit Association; 1977
- 25) Ewing, R.; Wilson, N. Innovations in Demand-Responsive Transit, Boston, MA: Center for Transportation Studies, Massachusetts Institute of Technology; 1976 October
- 26) Falcocchio, J. C. "Evaluating Transportation Services for the Elderly and Handicapped" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October

- 27) Falcocchio, J. Mobility of the Elderly and Handicapped: A Methodology for Evaluating the Effectiveness of Transportation Improvements for the Elderly and Handicapped, Final Report. Washington, DC: Department of Transportation; 1979 June; DOY-OS-70084
- 28) Feiss, C. L. Transportation for the Disabled and the Elderly: An action Guide/A Report of the Elderly/Handicapped TRansportation Study. Seattle, WA: Elderly/Handicapped Transportation Study; 1977
- 29) Ferse, C. L.; Yapp, S.; Shuman, L.; Lewell, S. B.; White, B.; Beck, J.; Ellis, L. B. Transportation Needs of the Disabled and the Elderly... Summary and Report. Seattle, Washington, 1977
- 30) Fitzgerald, P. G. Crain and Associates, User-Side Subsidies for Shared Ride Taxi Service in Danville Illinois Phase I, 1977
- 31) Gillan, J.; Wachs', M. Life Styles and Transportation Needs Among the Elderly of Los Angeles County, University of California at Los Angeles, School of Architecture and Urban Planning, 1975
- 32) Gillan, J.; Wachs', M. Lifestyles and Transportation Needs of the Elderly in Los Angeles. Transportation. 5(1): 45-61; 1976 March
- 33) Grey Advertising, Inc.; Asst. Chase, Rosen and Wallace, Inc. Summary Report of Data From National Survey of Transportation for Handicapped People. Prepared for UMTA, U.S. Department of Transportation, Washington, D.C., 1978.
- 34) Gray, B.; Brewer, K.; Woodman, W. "Mobility and Transportation for the Aged: A Phenomenological View." In: Transportation Research Record 688, Washington, DC: Transportation Research Board; 1978: 1-6
- 35) Guidelines for the Identification of the Transportation Needs of the Elderly and Handicapped. California Department of Transportation/ Division of Mass Transportation; 1978 November. Available from: NTIS, Springfield, VA; PB-291 926/AS
- 36) Hackett, L. W., Jr. Guidelines for the Identification of the Transportation Needs of the Elderly and Handicapped. Washington, DC: Urban Mass Transportation Administration; 1978 November; UMTA-CA-09-8002-79-1. Available from: NTIS, Springfield, VA; PB-291 926/4ST



- 37) Hamilton, Gloria S.; Frankel, Joanne; and Balistis, Miriam  
Elderly Nee Assessment and Inventory of Organizations Serving the Elderly, Prepared for District of Columbia Office on Aging  
Bureau of Social Science Research, Inc. Washington, D.C., 1978
- 38) Hartgen, D. T.; Howe, S. M.; Pasko, M. Analysis and prediction of non-work travel patterns of the elderly and handicapped. In: Transportation Research Record 637. Washington, DC: Transportation Research Record 637, 1977; 22-27.
- 39) Hartgen, D. T.; Weiss, D. L. Travel Patterns of the Elderly and Handicapped. Washington, DC: Department of Transportation; 1979.
- 40) Human Resources Division, Improved Transportation Services to the Elderly and Handicapped of Northern Virginia  
Phase I: Resource and Barrier Identification Summary Report  
Northern Virginia Planning District Commission, 1980
- 41) Institute for Public Administration, Transportation for Older Americans the State of the Art, 1975
- 42) Kelly, P.; Easley, M. A.; Pelham, B. "Statwide Coordination of Special Transportation in Florida" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 43) Lee, J. "Evaluation of an Urban Transportation System" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 44) Lerman, S. R. et al. Estimating the Patronage of Demand-Responsive Transportation Systems. Washington, DC: Department of Transportation; 1977; DOT-TsSC-977.
- 45) Lower Rio Grande Valley Development Council  
Elderly and Handicapped Transportation Study of the McAllen - Pharr-Edinburg Urbanized Area, August, 1980

- 46) Markovitz, J. K. "Transportation Needs of the Elderly" in Traffic Quarterly, 1971
- 47) Martin, R. L. "Local Planning for Rural Transportation" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 48) Martin R. L.; Doerflinger, M. C. "Statistical Survey Procedures to Determine Transportation Needs" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 49) McBrayer, D. B.; Howard, D. M.; Boyd, M. W.; Littleton, A. C. Existing Services Impact Study, v. 2, Appendix A, Seventeen Criteria: Analysis and Results, Final Report. Washington, DC: Department of Transportation; 1978 April; DOT-UMTA-IT-090067. Available from: NTIS, Springfield VA; PB-295 488/1ST.
- 50) McCall, Chister H. Special Transportation Services for the Elderly and Handicapped Urban Mass Transportation Administration, Springfield, Virginia, 1976
- 51) Middendorf, D. P.; Hassam, A. B. "Data Collection Issues in Transportation Planning" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 52) McKelvey, D. J. Guidelines and Considerations in Planning and Operating Transportation Systems for Older Americans. Iowa City, IA: Center for Urban Transportation Studies, Iowa University; 1976 April; UMTA-LA-11-0002-75-1. Available from: NTIS, Springfield, VA; PB-254 756/OST.
- 53) Miklojcik, J. L. "Mobility and Older Americans: An Analysis" in Transit Journal, May, 1976
- 54) Miklojcik, J. L. "Mobility and Older Americans: An Analysis" in Michigan Office of Services to the Aging Transit Journal Vol. 2 No. 2, 1976

- 55) Miller, J. A. "A Hierarchial Model of Latent Demand of the Handicapped and the Elderly." In: AMV Technical Notes, v. 111(5). McLean, VA: Alan M. Voorhees & Associates; 1976 March 1.
- 56) Miller, J. A. "Latent Travel Demands of the Handicapped and Elderly." In: Transportation Research Record 618. Washington, DC: Transportation Research Board; 1976: 7-12.
- 57) Paaswell, R. E.; Edelstein, P. "Study of Travel Behavior of the Elderly" in Transportation Planning and Technology Vol. 3 No. 3, State University of New York, Buffalo, 1976
- 58) Paaswell, R. E.; Edelstein, P. A Study of Travel Behavior of the Elderly, State University of New York at Buffalo, Department of Civil Engineering, New York, 1980
- 59) Pamanikabud, P. Urban Travel Characteristics of the Elderly and Handicapped People in Subsidized Taxi Program, 1980
- 60) Popper, R. J. "Transportation Issues: The Disadvantaged, The Elderly, and Citizen Involvement." Washington, DC: Transportation Research Board: 1876; TRB/TRR-618.
- 61) Public Technology, Inc. Elderly and Handicapped Transportation: Local Government Approaches, U.S. Department of Transportation, UMTA, 1979
- 62) Reden, Sheri; Carlson, Feiss; Carrolin; and Consultants An Evaluation of Metro's Special Transportation Service Program For the Elderly and Handicapped, Prepared for the Seattle-King County Division on Aging, Seattle, Washington, 1980
- 63) Rivers, J. S. Transportation for Older Americans, Institute of Public Administration, 1975
- 64) Rosenbloom, S.; Schelessinger, C. "Travel Patterns of Users and Nonusers of Special Transportation Services" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October

- 65) Saltzman, Arthur, Coordination of Transportation by Human Service Agencies An Interorganizational Perspective, The University of California, Irvine, California, January, 1980
- 66) Saltzman, A. "Factor Affecting Coordination" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October
- 67) Transportation for the Elderly: The State of the Art. Washington, DC: Department of Health, Education, and Welfare; 1975 January; (OHD) 75-20081.
- 68) Socio-Economic Studies Division of Federal Highway Administration Effective Citizen Participation In Transportation Planning Vol. 1, Community Involvement Processes Final Report U.S. Department of Transportation, Washington, D.C., 1976
- 69) U.S. Department of Transportation, Technology Sharing Program Office, Transportation Systems Center, Demand Responsive Transportation - State of the Art Overview, 1974
- 70) U.S. House of Representatives, 94th Congress Select Committee on Aging Senior Transportation - Ticket to Dignity, A Report by the Subcommittee of Federal, State and Community Services U.S. Government Printing Office, Washington, D.C., 1976
- 71) Urban Transportation Systems Associates, Inc. Urban Mass Transportation Travel Surveys Prepared for: U.S. Department of Transportation, Washington, D.C. Federal Highway Administration with UMTA, 1972
- 72) Wach, Martin Life Styles and Transportation Needs of the Elderly in the Future University of California at Los Angeles, 1975
- 73) Wachs, M. Transportation for the Elderly--Changing Lifestyles, Changing Needs. Berkeley, CA: University of California Press; 1979.

- 74) Wachs, M.; Blanchard, R. D.; Bunker, J. B.; Westfall, M. Determining the Future Mobility Needs of the Elderly: Development of a Methodology, Final Report. Washington, DC: Department of Transportation; 1976 June; DOT-OS-50109. Available from: NTIS, Springfield, VA; PB-262 809/7ST.
- 75) Wachs, M.; Blanchard, R. D. Life Styles and Transportation Needs of the Elderly in the Future, California University, Los Angeles, UMTA, 1975
- 76) Walker, J. M. "Impact of a Demand-Responsive Transportation System" in Transportation for the Elderly and Handicapped, U.S. Department of Transportation, Technology Sharing Office, 1980 October

Report No.: DC-11-0012

**THE NONUTILIZATION OF SPECIAL TRANSPORT  
SERVICES BY THE ELDERLY IN URBAN AREAS**  
A Case Study of Washington, D.C.

Deborah L. Lyons  
Isaac Lipowitz

Department of Community and Urban Planning  
University of the District of Columbia  
Washington, D.C. 20008



August 1982

**EXECUTIVE SUMMARY**

Document is available to the U.S. public through the  
National Technical Information Service  
Springfield, Virginia 22161

Prepared For

U.S. DEPARTMENT OF TRANSPORTATION  
URBAN MASS TRANSPORTATION ADMINISTRATION  
University Research and Training Program  
Washington, D.C. 20590

1. Report No. DC-11-0012	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle THE NONUTILIZATION OF SPECIAL TRANSPORT SERVICES BY THE ELDERLY IN URBAN AREAS A Case Study of Washington, D.C.		5. Report Date August, 1982	
		6. Performing Organization Code	
7. Author(s) Deborah L. Lyons and Isaac Lipowitz		8. Performing Organization Report No.	
9. Performing Organization Name and Address Department of Community and Urban Planning University of the District of Columbia Washington, D.C. 20008		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No. DC-11-0012	
13. Sponsoring Agency Name and Address U.S. Department of Transportation Urban Mass Transportation Administration University Research and Training Program Washington, D.C. 20590		12. Type of Report and Period Covered Final Report August, 1981 - August, 1982	
		14. Sponsoring Agency Code	
15. Subject Terms			
<p>16. Abstract</p> <p>This study is an examination of reasons why eligible elderly in urban areas do not utilize available special transport services. The objectives of the research project were to: (1) Analyze reasons given by eligible elderly for not utilizing available transport services; (2) determine the extent of utilization by the elderly; (3) construct socio-economic profiles of eligible elderly who do/do not utilize special transport services; (4) identify problems encountered by providers in reaching elderly populations; and (5) formulate recommendations for solving the problems identified.</p> <p>A case study approach was used to analyze and examine reasons for nonutilization of services and included: A field survey of 140 elderly persons; a telephone survey of 27 providers of special transport services; focused group discussions; and secondary data sources.</p> <p>Less than 15 percent of the urban elderly who need special transport services use them. Reasons for nonutilization can be grouped into four areas: (1) Alternatives available; (2) lack of knowledge; (3) service characteristics; and (4) pride.</p> <p>Nonusers who <u>need</u> special transport services are often less active, less independent and less healthy than the elderly who need and utilize such services.</p> <p>Providers of special services rely on agency referrals and "word-of-mouth" to identify and service elderly populations. Community outreach must move from this passive to a more aggressive phase.</p>			
17. Key Words elderly special transportation socio-economic characteristics needs assessment		18. Distribution Statement Document is available to the U.S. public through National Technical Information Service, Springfield, Virginia 22161.	
19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages 131	22. Price

## INTRODUCTION

Improving the mobility of older Americans has been a major goal of transportation and elderly programs and policies at both the federal and local levels. One of the strategies designed to achieve this goal has been the development and funding of numerous special transport services as alternatives and/or ancillary travel modes for the elderly in urban and rural areas.

Although there has been a proliferation of special transport services during the last five years, there remains a gap between service goals and service levels. Most eligible elderly are not having their travel needs met through the use of special transport services. While many elderly who are eligible to participate in these programs have other alternative modes of travel, a significant number of urban elderly are still handicapped by lack of transportation.

This study examines the demand-side of special transportation for the elderly. Several recent studies have examined the supply-side issues revolving around coordination, vehicle design and maintenance and insurance. However, there is a need for more research focused on how to identify and service elderly and other transportation handicapped populations.

## STUDY OBJECTIVES

This study examines reasons why eligible elderly do not utilize available special transport services. The specific objectives of this research project were to:

1. Analyze in detail problems and/or reasons given by eligible elderly for not utilizing special transport services;
2. Determine the extent to which eligible elderly populations utilize special transport services;
3. Construct a socio-economic profile of eligible elderly who do/do not utilize special transport services;
4. Identify problems encountered by providers of special transport services in reaching eligible elderly populations; and
5. Formulate recommendations and guidelines for solving the problems identified.

In carrying out these specific objectives, the research team reviewed relevant literature, used data from an existing needs assessment survey, completed telephone and field interviews with providers and users, respectively, and held focused group discussions with D.C. elderly.

## APPROACH

This research project used a case study approach to examine and analyze reasons why eligible elderly do not use available special transport services. Several primary and secondary data sources provided the base of information used by the researchers to assess problems and formulate recommendations.



An extensive review of literature focusing on the elderly as users of special transportation was completed. This review included materials on methodologies for needs assessments and demand estimation techniques utilized in predicting latent travel demand and coordination of services.

Data for the socio-economic profile were obtained through cross tabulations of data contained in the raw data files of the Elderly Needs Analysis Survey done by the Bureau of Social Science Research (BSSR) for the D.C. Office on Aging in 1978. The Office on Aging, responsible for the city's special efforts in transportation for the elderly, contracted with BSSR to conduct a telephone survey of 1572 noninstitutionalized elderly within the District of Columbia. Results from the survey were used in developing the needs assessment component of the District of Columbia Plan on Aging, 1981-1983.

Current inventory listings of special transportation services put out by the D.C. Office on Aging and the Directory of Special Transportation Services published by the Metropolitan Washington Council of Governments (1981 revised edition) were used to identify providers for in-depth interviews. A telephone survey of 27 of the 43 providers of special transport services was conducted to determine characteristics of services available, methods of identifying and reaching target populations, demand for services, problems encountered in services delivery and participation in coordinated services.

A stratified random sample of 140 elderly were interviewed at trip destination points. Typical trip destination points of the elderly were identified and selected. Survey sites were stratified according to the locations of residences of elderly who need, but do not use, special transportation services. Field interviews investigated reasons for non-utilization of special transportation and mode choice of nonusers.

A series of six focused group discussions with a total of 65 elderly persons were planned and held at various locations throughout the community. Information obtained through the Elderly Needs Analysis Survey, telephone survey of providers and field interviews were used as a guide in the conduct of these group sessions. The discussions were aimed at gaining insight into solution methodologies as perceived by users and/or potential users of special transport services.

Preliminary research findings and potential problem solutions were discussed during interviews with staff of the D.C. Office on Aging and with staff of the Institute of Gerontology of the University of the District of Columbia.

#### REPORT ORGANIZATION

This report is divided into seven chapters and appendices. The chapters present the results and analysis of the five components of the project: Chapter two provides the background to the study through the exploration and analysis of existing literature on the elderly as users of special transportation services; chapter three identifies the target population and socio-economic characteristics of users and nonusers of special transport services;

chapter four presents the survey results from telephone interviews with providers of special transport services; chapter five examines reasons for non-utilization of services based on results of field interviews with elderly nonusers; chapter six summarizes the results of the focused group discussions held in the community; and chapter seven reports the major findings and presents recommendations for problem solutions and guidelines for implementation.

## FINDINGS

Special transportation programs are presently reaching only 14.7 percent of the urban elderly who say they need the services that such programs provide. Therefore, in urban areas with large elderly populations, a sizeable number of the transportation handicapped elderly are still unable to travel by private, public or special transportation. In order to adequately examine the reasons for nonutilization of special transport services, the population of elderly nonusers must be further segmented to include only those persons who are both eligible and in need of the services provided.

Empirically based data have demonstrated that the principle reasons for lack of utilization of special transport services is the lack of a need for the services by a large number of eligible persons. However, since the elderly population with available transit options are not the primary concern here, we must further segment the elderly population to identify the characteristics of those persons who need the services provided.

Among the elderly who need special transportation services, both users and nonusers are just as likely to be female, minority, live alone, consider money a problem and have difficulties accessing public transportation. However, there are identifiable differences between those elderly who need and use special transportation and those who need but do not use the services.

Nonusers who need special transportation services have somewhat different living arrangements than users of special transportation services. Nonusers are older and more likely than users to live with their spouse or children, own their dwelling unit and have longer tenure in their present neighborhood. Users are more likely to live with other relatives and to live in subsidized housing.

In general, users of special transportation services appear to be healthier, more active and more independent than nonusers who need such services. While they have a lower education level than nonusers, users of special transportation services are more apt to be employed part-time, vote, and belong to a club or organization. Nonusers who need special transportation services are more likely than users to be physically handicapped, have unmet health and dental needs and have inadequate incomes to meet their needs.

Reasons given for the nonutilization of special transportation services by the elderly generally fall into four categories: Alternatives available, lack of knowledge, restrictive service characteristics, and pride.

The service capacity of the existing network of special transportation service is inadequate to meet the travel needs of the nonusers who need

special transportation services. The median rate of utilization for all providers is currently 82 percent seat occupancy. Since 85 percent of the nonusers who need special transportation services are not currently being served, the remaining eighteen percent seat occupancy, if utilized fully, would not begin to satisfy the perceived latent demand for services.

Given the excess of demand over supply for special transportation services, there is little incentive to vigorously pursue a program of community outreach. Most providers of special transportation services follow a passive marketing approach; mainly, "word-of-mouth" and agency referrals. The D.C. Office on Aging uses mailouts to senior clubs and organizations, churches, senior centers and individual senior citizens on its mailing list and public service announcements of a telephone number to call for senior related services.

While there is a heavy reliance on getting in touch with senior citizens through clubs and organizations the majority of seniors do not belong to such groups. The elderly who need transportation assistance most are the least likely to belong to any club or organization. However, participation in religious activities is very high among the elderly in general and even more so among the low income elderly who are likely to need transportation assistance. Therefore, the church may serve as a focal point for reaching the target population.

#### RECOMMENDATIONS

Community outreach programs must leave the passive phase which is essentially comprised of information dissemination to standard programs or agency mailing lists and informal "word-of-mouth" networks. While these methods may be effective in reaching a large segment of the target population, they are ineffective in reaching a large segment of those who need services most. One such method which should be explored is the strengthening of the church-based network of contacting seniors in need of services.

Service delivery agencies in urban areas should explore more effective ways of utilizing the existing transportation network to provide transportation services to the elderly in lieu of or in addition to expanding special transport services. User-side subsidies should be examined as an alternative to expanding special transport services in the District of Columbia.

Cooperative maintenance agreements should be explored by providers of special transportation services. Since all vehicles must be maintained, regardless of funding sources, cooperation in this area is feasible, if based on the cost of services rendered.